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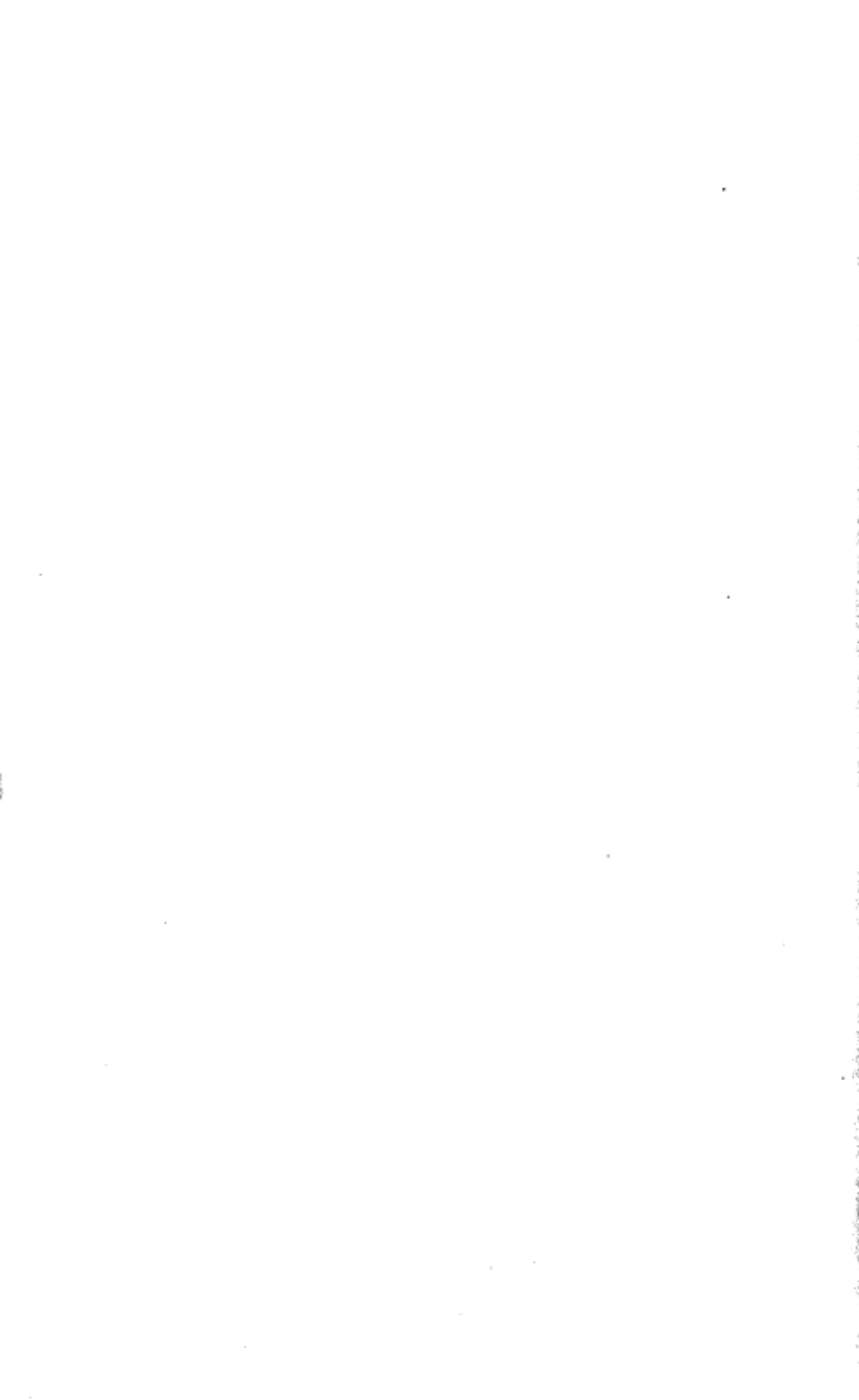
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**FLORA AND FAUNA  
IN  
SANSKRIT LITERATURE**





# FLORA AND FAUNA IN SANSKRIT LITERATURE



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Kashmir, Tantra in Bengal, etc., etc.*

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FLORA AND FAUNA  
IN  
SANSKRIT LITERATURE

Dr S. C. Banerji

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## PREFACE

The works in Sanskrit present an integrated picture of India through ages. It is not proper to think that these are purely literary works or speculative treatises or religious lucubrations. Human civilisation cannot be conceived without plants, beasts and birds. In human life these have always played a vital rôle. Indian society is no exception to this general law of life. The part, played by the plant-kingdom and the animal kingdom in Indian life, as revealed in Sanskrit literature, has not yet been studied exhaustively. There have been studies on herbs relating to Āyurveda. The flora and fauna of some works have been studied.

It is our object to study the flora and fauna as revealed in Sanskrit works starting from the *Ṛgveda* down to classical times. The task is a stupendous one, and the difficulties are many. In the first place, the number of Sanskrit works is legion. Secondly, many of the works have not yet been fully indexed. As a workable plan, we have selected the representative works of each period for the purpose. Thus, for the Vedic period, we have taken the *Ṛgveda* and the *Atharvaveda*. The *Yajurveda* is ritualistic, and the *Sāmaveda* mainly musical. So, these two have been omitted except for just a few references.

Coming to the Brāhmaṇas, we have selected the principal works.

The Upaniṣads being mainly speculative and esoteric have been generally left out.

Of the Vedāṅgas, we have chosen the Kalpasūtras and Vyākaraṇa, as the others will not be of much help in this work. Among Kalpasūtras again, the Śulbasūtras being not of any use have not been taken into account. The Śrauta-sūtras being concerned with details of sacrifices, do not serve our purpose. In Vyākaraṇa, we have selected the *Aṣṭādhyāyī* as the oldest and most authoritative one. The *Aṣṭādhyāyī* is explained by the *Mahābhāṣya* which has, therefore, been taken into account.

Of the epics, both the *Rāmāyaṇa* and the *Mahābhārata* have been selected.

Regarding Purāṇas, we have selected only those whose flora and fauna have been studied.

As regards classical Sanskrit literature, the number of poetical, prose and dramatic works is huge. Again, there has not yet been an index verborum of most of the works. Of late, A. Scharpé has made an attempt to compile a Kālidāsa lexicon. The work is not yet complete. The author of the present work compiled *Kālidāsa-kośa* as early as 1968. On the basis of that work, the flora and fauna of Kālidāsa have been included. Kālidāsa may be taken as the most reliable representative of the classical writers. So, his poetical and dramatic works may be regarded as giving a picture of this aspect of the India of the classical period. Doubts have been expressed about the authenticity of the *Kumārasambhava*, Cantos ix-xvii, and the *Ṛtu-saṃhāra*. Still these have been taken into account in describing the flora and fauna of Kālidāsa. Other apocryphal works, attributed to him, like the *Nalodaya*, *Śṛṅgāra-rasāṣṭaka*, etc., have been left out.

Among prose works, the *Kādambārī* and the *Harṣacarita* of Bāṇabhatta have been selected as representative.

Our work is not intended to be a mere catalogue of the plants and animals in ancient India. Under the entries, attempt has been made to lay down their relation to cultural and social life. Thus, it is a sort of study of the Indian society in plant and animal perspectives. From the perusal of this work one can know the various uses of trees and plants in those days. As regards beasts, birds and fish, one can learn which of them were used as food and which were prohibited. One can try to ascertain the scientific reason, if any, underlying the prohibition.

In some of the works, consulted by us there are processes for the luxuriant growth of trees, leaves and flowers. There are also methods of the treatment of diseased trees. Again, some trees are stated to be beneficial in a house while others are injurious. Ancient Indian wisdom has proved to be of a high order in many spheres of practical life, e.g., astronomy, medicine, politics, art of warfare, etc. So, the above information should not be condemned as naive beliefs or superstitious ideas. One of our objects in composing this work is that it would

stimulate a spirit of scientific enquiry about the practical wisdom of the ancient Indians relating to botany, and the modern scientist will get many of the botanical observations of the Indians at one place and in a systematic manner so that he can test their veracity. Some of the botanical information, contained in Sanskrit treatises, may add to the existing fund of knowledge in this branch of science.

What has been stated above is applicable also to the information about fauna in Sanskrit works. Besides being of historical interest, it may add to the existing quantum of knowledge about zoology, ichthyology, ornithology and general biology.

The names of medicinal plants and herbs, mentioned in medical treatises, have already been collected in such works as *Bhāratiya Vanaśadhi* by Biswas and Ghosh, *Indian Medicinal Glossary of Vegetable Drugs in Br̥hat-trayī* by Singh and Chuneekar, and *Vanaśadhi-darpaṇa* of V. Sengupta. So works on Āyurveda have been left out for the present purpose.

A few words about the plan of the work. In the introduction we have dealt with the general characteristics of the flora and fauna as revealed in the Sanskrit works. Then follow the lists of plants and animals. Under each item we have given, as far as practicable, the modern botanical or zoological name as the case may be. Then follow the references to the sources. After the references, such sociological and cultural information as can be gathered has been set forth.

To all the earlier workers in the field we express our gratitude. All the works, consulted by us, have been mentioned in the bibliography. Our special thanks are due to Prof. Ajit Banerji of Zoology Deptt. of Presidency College, Calcutta, and Prof. P. Sen Sarma of Botany Deptt. of Bangabasi College, Calcutta, the former for help in the portion on fauna and the latter for suggestions in the portion on flora. Sri S. Chaudhury, Librarian, Asiatic Society, Calcutta, has obliged the author by helpful suggestions.

The author takes the opportunity to thank Prof. Kalyani Datta of Basanti Devi College, Calcutta, for kindly lending valuable books from her personal library which is dearer to her than her life.



The author's daughter, Dr. Chanda Chakraborty, of the above college, and last not the least, his wife, Sm. Ramala Banerji, have been of constant help at various stages of the work. His relationship with them leaves no room for thanksgiving.

The author of this work will be grateful if specialists in the field supply additional references, and offer suggestions for the improvement of the work.

The proprietor of Naya Prokash was good enough to accept the work readily and to undertake its publication within a short time. The author is grateful to him.

Durgā-pūjā,  
1384 B. S.  
(October, 1977)

S. C. Banerji

**N.B.** There may be certain observations which are contrary to science. We have followed the tradition, recorded in Sanskrit lexicons and relevant works, without examining it scientifically. For example, under Vanaspati we have stated that it is a tree that bears fruits but no flowers. But, it is a botanical absurdity according to botanists.

## ABBREVIATIONS

[ N. B. The references to the different *Kāṇḍas* of the *Rāmāyaṇa* are based on the Bengal recension, Calcutta Skt. Series ed. ]

A—*Abhijñāna-śakuntalā* of Kālidāsa, NSP ed., Bombay.

AB—*Aitareya Brāhmaṇa*

Ādi—Ādikāṇḍa

AK—*Amarakośa*

AP—*Āpastamta-dharmasūtra*

Ara—*Aranyakāṇḍa*

Ayo—*Ayodhyākāṇḍa*

B—*Baudhāyana-dharmasūtra*

CU (Ch. U)—*Chāndogya Upaniṣad*

G—*Gautama-dharmasūtra*

H—*Harṣacarita*

JB—*Jaimini Brāhmaṇa*

K—*Kumārsambhava*

Kāth. Sam.—*Kāthaka Saṃhitā*

Kaus. Sūtra—*Kauśika Sūtra*

Kis—*Kiskindhākāṇḍa*

KS—*Kāmasūtra* of Vātsyāyana

Mait. Sam.—*Maitrāyaṇī Saṃhitā*

Mal—*Mālavikāgnimitra* of Kālidāsa, NSP ed., Bombay, 1950.

MP—*Matsyapurāṇa*

MS—*Manu-smṛti*

MV—*Matsya-vinoda* a section of the *Mānasollāsa*

Pan—*Pāṇini*

PB—*Pañcaviṃśa Brāhmaṇa*

R—*Raghuvamśa*

Ram—*Rāmāyaṇa*

RS—*Ṛtusaṃhāra*, included in *Kālidāser Granthāvalī*, in Bengali characters, Calcutta, 1322 B.S.

RV—*R̥gveda*

SB—*Śatapatha Brāhmaṇa*

- Sun—Sundarakāṇḍa  
 SVB—*Sāmavidhāna Brāhmaṇa*  
 TB—*Taittirīya Brāhmaṇa*  
 Taitt. Sam.—*Taittirīya Saṃhitā*  
 TS—*Taittirīya Saṃhitā*  
 Utt—Uttarakāṇḍa  
 UV—*Upavana-vinoda*  
 V—*Vikramorvaṣīya* of Kālidāsa, ed. Velankar, New Delhi,  
 1961.  
 Vi—*Viṣṇu-smṛti*  
 Vāj. Sam.—*Vājasaneyi Saṃhitā*  
 Vas—*Vasiṣṭha-dharmaśāstra*  
 VP—*Vāyupurāṇa*  
 VS—*Vājasaneyi Saṃhitā*  
 Yud—*Yuddhakāṇḍa*  
 YS—*Yājñavalkya-smṛti*

## CHRONOLOGY OF THE WORKS CONSULTED

*Ṛgveda*—C. 1500 B.C.

*Brāhmaṇas*—between the conclusion of hymn composition of *Ṛgveda-saṃhitā* and the rise of Buddhism.

*Kalpasūtras*—approximately synchronous with the rise and first spread of Buddhism.

(including *Gṛhya* and *Dharmasūtras*)

*Aṣṭādhyāyī* of Pāṇini—C. 4th. cent. B.C.

*Arthaśāstra* of Kauṭilya

*Suśruta-saṃhitā*—Originated in the last centuries before the Christian era, and appeared during the first centuries A.D. in a well-defined form. Present form fixed by the 7th. cent. A.D., according to some.

*Manu-smṛti*—between 200 B.C. and 200 A.D.

*Yājñavalkya-smṛti*—present form supposed to have been composed during the first two centuries of the Christian era.

*Mahābhāṣya* of Patañjali—C. 2nd. cent. B.C.

*Rāmāyaṇa*—present form C. 2nd. or 3rd. cent. A.D.

*Tattvādihigama* of Umāsvāti—C. 135-219 A.D.

*Mahābhārata*—present form C. 4th. cent. A.D.

*Purāṇas*—*Vāyu* (bet. 4th cent. B.C. and 500 A.D.)

*Kālidāsa*—C. 400 A.D.

*Amarakośa*

or

*Nāmaliṅgānuśāsana*—C. 4th. cent. A.D.

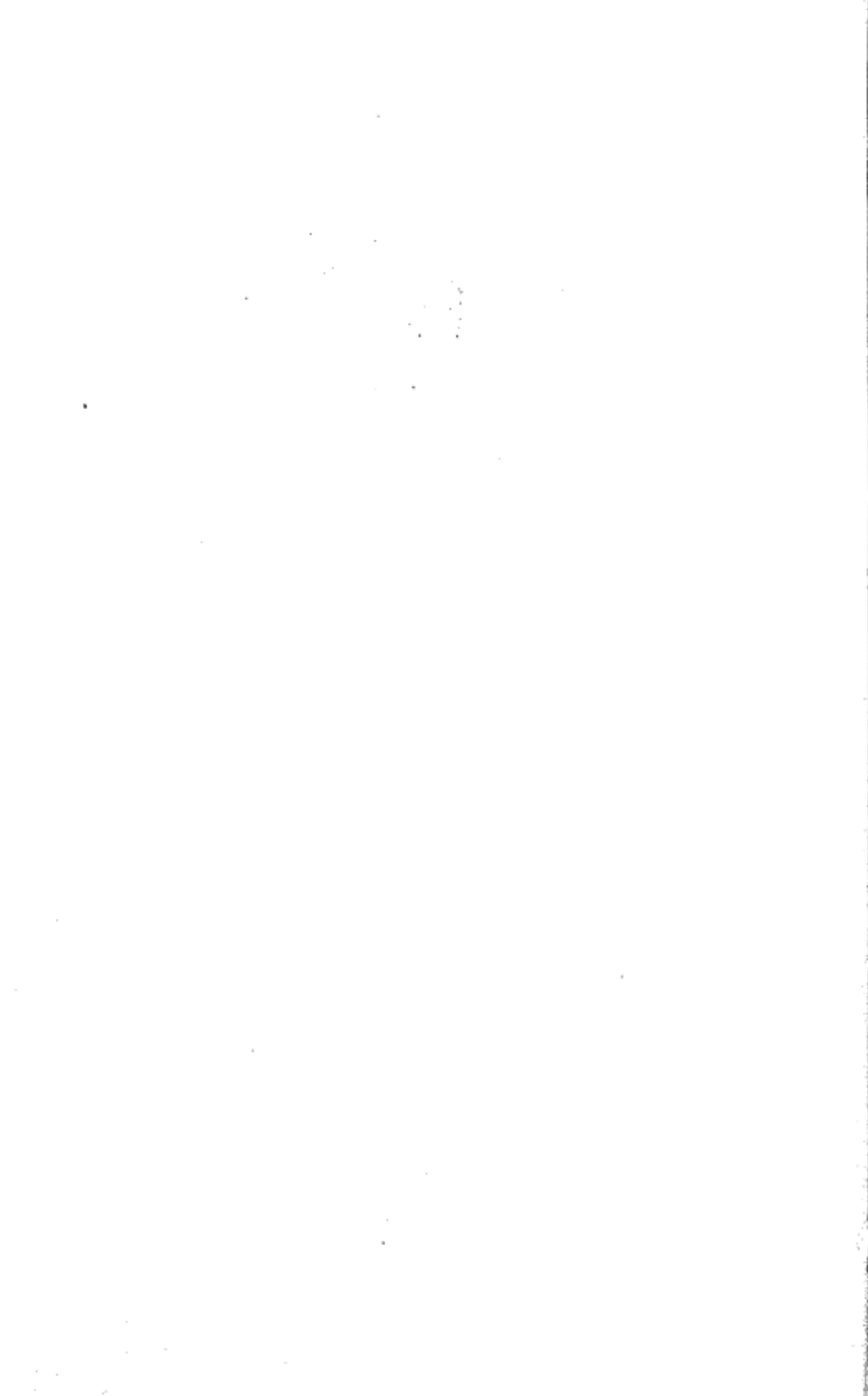
*Bhāṇabhaṭṭa*—earlier half of the 7th. cent. A.D.

*Mānasollāsa* of Someśvara—1129 A.D.

*Mallinātha*—C. latter half of the 14th. cent. or earlier half of the 15th.



# FLORA



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## INTRODUCTION

Man was born in the cradle of nature. As the child grew up he became aware of his surroundings. As sense dawned upon him, he saw, with an admiring eye and a mind filled with awe, the various aspects of nature—the vast expanse of the sky, the sun, the moon, the cloud above him and the plant and animal kingdoms surrounding him.



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. As man saw the light of civilisation, he felt the need of covering his body partly out of a feeling of shyness and partly to keep off cold and the uncongenial effect of weather. The trees provided him with barks. Gradually as he emerged from caves and caverns, he felt the necessity of shelter. In this respect also trees provided the 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 into garments. The supreme importance of the plant world lies in its gift of various kinds of foodgrain 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 civilisation, he learnt to use plants and herbs, the roots of some trees as drugs for curing various diseases.

In course of time, certain trees became objects of veneration. We often meet with the *caitya-vṛkṣa* which was the designation of a religious fig tree or any other tree growing by the street or a fig-tree standing on a sacred spot. Fetishism is found as early as Vedic times. Some trees were worshipped while others were believed to be haunted by evil spirits. As instances of the attribution of divinity to plants with particular reference to their efficacy in healing diseases we may mention RV. X. 97, AV. VI. 136. 1, etc. The AV. 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 *Śamī* tree, one was afflicted with baldness which was regarded as extremely loathsome even in Vedic times. The wood of some sacred trees, e.g. *udumbara* was used in sacrifices. The king's throne (*āsandī*) 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 *Yūpas*, stakes for animal-slaughter in religious rites and as the staff of a Kṣatriya Brahmacārin. The *Bilva* and *Palāśa* trees provided the staff of a Brāhmaṇa Brahmacārin.

In Vedic India we find that various agricultural and sacrificial appliances and vessels were made of wood. The *Vibhitaka* tree (RV. VII. 86. 6 ; X. 34. 1) supplied the wood with which dice (*akṣa*) were made. The juice, extracted from *Soma*, which has not yet been definitely identified, was regarded as the most exhilarating drink.

The familiarity of ancient Indians with the various matters relating to the plant kingdom is evident from such terms as *Vṛkṣāyurveda* which means the science of treatment of plant diseases. The *Sītādhyakṣa* (Superintendent of agriculture) of the *Arthaśāstra* was required to have knowledge of this science.

As time went on, the *tulasī* plant acquired great sanctity in the Purāṇas and Vaiṣṇava-śāstras.

Gradually man came to learn a lot about the medicinal value of fruits, roots, herbs, leaves, etc. In ancient India, we find a great many plants of therapeutic value.

In course of time, the flowers provided by plant kingdom served to give delight to people, and came to be used as offerings to gods and presents to near and dear ones on happy occasions. By the time Vātsyāyana, author of the *Kāmasūtra*, flourished the house of a man about town (*nāgaraka*) could not be conceived without a garden.

Trees played a considerable part in the 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 (e. g. *Matsya-Purāṇa*, Chap. 154, Verses 511-12, Chap. 59, Verses 17-20, *Agni*, Chap. 70, Verses 1-9 ; *Varāha*, Gokarṇa-māhātmya, Padma, Chap. 26).

Some Purāṇas lay down the benefits derived from trees

(e.g. *Agni*, Chap. on *taḍāga-vṛkṣa-praśaṃsā*, Chap. on *Varuṇa*... *pratiṣṭhā* ; *Varāha*, *Gokarṇa-māhātmya*).

Trees came to be regarded as so important that their felling or deforestation without reason and permission was looked upon as a penal offence (e. g. *Manu-smṛti* viii. 285, 330, 331 ; ix. 143, 145). Degrees of punishment, commensurate with the gravity of offence in this connexion, have been prescribed (e. g. *Matsya-purāṇa*, Chap. 227, Verses 91-95).

Indian civilisation was mainly based on forests. The Upaniṣads, 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 was favourable to meditation is attested by the very title *Āraṇyakas* (forest-texts) of which the Upaniṣads formed parts. The forest provided shelters not only to the recluse but also to worldly men in the third stage (*Vānaprastha*) of their lives. Gautama practised transcendental meditation under the Bo-tree, and attained Buddhahood.

The epics and Purāṇas contain descriptions of many trees, plants and flowers. The *Pañcavaṭī* forest in the *Rāmāyaṇa* conjures up a vivid picture of the forest-abode of Rāma in exile. We read of the wanderings of the homeless Pāṇḍavas through forests.

Sanskrit prose, poetical works and dramas are replete with references to flowers and foliage, trees and shrubs. Flower gardens are found to be a favourite resort of lovers to whom they serve as excitants (*uddīpana vibhāva*). In the *Abhijñāna-Śakuntalā*, we find the three hermitage girls of peerless beauty, engaged in watering plants. The natural setting excites the love of the king for Śakuntalā. The bower provides a convenient spot for love-making to the king and the girl. Forests, particularly bowers, have often been described as very suitable for tryst. *Cala sakhi kuñjaṃ satimira-puñjam* (let's go to the bower steeped in a mass of darkness)—this line in the *Gītāgovinda* of Jayadeva sets the seal of high romance in such a spot. *Revā-rodhasi vetasa-tarutale cetah samutkaṇṭhate* (the heart becomes eager for the cane-bower on the river Revā or Narmadā)—this

a glowing line showing the erotic urge of the beloved for a place of assignation provided by clusters of plants. It has been immortalised in Vaiṣṇava literature as a passionate desire of the beloved for union with Kṛṣṇa.

Some trees have to be favourite to poets, and have become conventional. For example, the *Tamāla* tree has been mentioned by Kālidāsa in the *Raghuvamśa* (XIII.) as adding to the beauty of the sea-coast. Again, Jayadeva, in his *Gītagovinda*, sings of the *Tamāla* trees darkening the forest-regions under the sky overcast with clouds. At some places, we find damsels using floral decorations. For instance, in the *Meghadūta* (ii, 2) women of the city of Alakā are described as holding a lotus in hand, putting on the *Śirīsa* flower in the ears and the *Nīpa* or *Kadamba* flower in the parting of hairs. Many romantic ideas are conventionally associated with trees. For example, the *Aśoka* tree is said to put forth its crimson blossoms at the touch of the foot of a woman. Again, the *Bakula* tree is stated to bear flowers with the spittle of a woman sprinkled on it.

Trees have been objects of description by various poets. For example, the anthology, *Sadukti-Karṇāmṛta* quotes five verses (Nos. 1881-1885 of Calcutta ed.) by various poets dwelling on the comfort caused by trees to human beings. The *Aśvattha*, sandal-tree, mango-tree, silk-cotton tree are some of the trees described by poets. For example, see *Sadukti-karṇāmṛta* (Calcutta ed., Nos. 1891-1905, 1911-1915).

The Sanskrit poets and writers have cast their admiring eyes on trees. With a passion for learning they have sought to derive lessons from them. For example, among the didactic verses we find some dealing with what trees have to teach us. In the *Abhijñāna-Śakuntala* (V. 12), Kālidāsa observes that trees, laden with fruits, bend low ; from this we learn that a good man should not be puffed up with prosperity. The *Hitopadeśa* 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 fatigue of one who resorts to its shade. This

teaches us that, though suffering pain, we should do good to others.

Thus, the ancient Indians did not rest content by merely utilising trees for their comfort and convenience. They also tried to derive lessons from them, and enjoyed the beauty of the trees and their blossoms. That they looked at trees from various angles of vision is attested by the fact that, whereas we have the single word 'tree' in English, there is quite a number of words in Sanskrit to convey this meaning ; each of these words brings out a characteristic feature of the tree. For example, the noted lexicon *Nāmaliṅgānuśāsana*, popularly known as *Amarakośa*, gives the following words to denote tree ; the respective derivative meaning<sup>1</sup> is given against the words :

*Vṛkṣa*—*Vṛścyate Chidyate* (that which is cut)

*Mahīruha*—that which grows on the earth

*Śākhī*—that which has branches

*Pādapa*—*padair mūlaiḥ pibati* (that which drinks sap with roots)

*Taru*—*taranti anena ātapam* (that by which people overcome heat)

*Anokaha*—*anasah śakaṭasyākaṁ gatiṁ hanti* (that which obstructs the pace of a cart)

*Kuṭha*

*Sāla*

*Palāśī*—that which has leaves

*Dru*

*Druma*—*drur vṛkṣaikadeśo'syāsti* (that which has a part of the tree)

*Agama*—*na gacchati* (that which does not move).

The word *Vanaspati* (lit. lord of the forest) appears to have originally denoted trees in general. The meaning of the term came to be contracted in latter times when it used to mean a tree bearing fruits without flowering.

1. We give the meanings in Sanskrit, as laid down by Kṣīrasvāmin, the commentator. Where the commentator has not suggested any etymological meaning, we have given the meaning in English. Where neither the commentator suggests a meaning nor is the meaning clear, we could not give any conceivable clarification.

The word *vana* appears in the early stages to denote trees in a collective sense.

Thus, we find that trees were intimately associated with the life of the ancient Indians. Naturally a spirit of enquiry grew among them as to the effect of trees growing near their dwelling places. While some trees were regarded as salutary, others were looked upon as bad. This sort of speculation originated as early as the Vedic period. We have seen above that Vedic people believed some trees to be haunts of evil spirits. For example, *Gobhila-grhyasūtra* (iv.7) holds that *Aśvattha* involves danger of fire to the house, *udumbara* leads to optical diseases etc. In the *Bṛhat-saṃhitā*, such trees as *Āśoka*, *Punnāga*, etc. are conducive to welfare. Some Purāṇas (e.g. *Matsya*, Chap. 255, *Brahmavaivarta*, Chap. 102 etc.) dwell on this topic.

It is interesting to note that the scientific spirit of enquiry about the plant kingdom led the ancient Indians to discover that plants and trees also have life—a consciousness which arose at a time when most other contemporary civilised countries were ignorant of the fact. This is proved by the *Ṛgveda* (X. 97.21), *Manu-smṛiti* (1. 49), *Mahābhārata* (Śānti. Chap. 184).

It should be noted that ancient Indians did not merely indulge in superstitious ideas about trees and plants. They not only appreciated the beauty of trees and flowers and recognised their utility, but also developed a regular science of Botany.

We do not know of a single work devoted exclusively to Botany. But, the knowledge of the ancient Indians about different branches of this science is borne out by works on *Āyurveda*, *Kṛṣiśāstra*, *Dharmaśāstra*, *Arthaśāstra*, etc. as well as by some lexicons. Terms like *Vṛkṣāyurveda*, *Vanaspati-vidyā* indicate subjects included in Botany.

Botanical information of various kinds can be gathered from the books or from portions of the books noted below<sup>1</sup>.

( In Chronological Order )

*Ṛgveda* (c. 1500 B.C.)

x. 97.15, 21 ; x. 117 ; x. 145, etc.

- 
1. Only the principal works are mentioned. Of the portions of books, only a few prominent ones are noted.

*Atharvaveda* (Probably after 1500 B.C.)

ii. 8.3 ; viii. 7 ; x. 7.38; xi. 6.10, etc.

Upanisads (c. 1000-600 B.C.)

*Bṛhadāraṇyaka*—iii. 9; iv. 6.1.

*Chāndogya*—i.1.2 ; vi. 12.1, 2.

*Aṣṭādhyāyī* of Pāṇini (c. 4th. cent. B.C.)

*Mahābhāṣyā* of Patañjali (c. 2nd. cent. B.C.)

*Mahābhārata* (Present from—c. 4th. cent. B.C. to 4th. cent. A.D.<sup>1</sup>)

Śānti-parvan, Chap. 184.

Purāṇas (Early works composed before 7th. cent. A.D.<sup>2</sup>).

*Agni-purāṇa*—Chaps. 13, 70, 194, 246, 248, 281, 282,

*Padma-purāṇa*—Chap. 26.

*Matsya-purāṇa*—Chaps. 59, 154, 227/91-95, 255, 256.

*Varāha-purāṇa*—Gokarṇa-māhātmya.

*Viṣṇu-purāṇa*—4/25, 7/37-39.

*Bhāgavata-purāṇa* (10th cent. A.D.<sup>3</sup>)—Skandha iii. 10/19, 20.

*Vāyu-purāṇa* (Chaps. 3, 6, 8, 24, 35, 37, 38, 41, 43, 45, 47, 49, 57, 62, 63, 65, 69, 70, 72, 75, 77, 78, 91, 94 etc.

*Manu-saṃhitā* (present form between 4th cent. B. C. and 4th cent. A.D.<sup>4</sup>) i. 46-49.

*Arthaśāstra* (about 300 B.C.<sup>5</sup>).

*Bṛhatsaṃhitā* of Varāhamihira (c. 1st cent. B.C.<sup>6</sup>). Chaps. 53, 54, 58.

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1. See Winternitz, *History of Indian Literature*. I. P. 465.
  2. *Ibid.* p. 525. According to some, the compilation of the *Vāyupurāṇa* extends from the 5th cent. B.C. to 500 A.D. (See D. R. Patil, *Cultural History from Vāyupurāṇa*, pp. 4, 16.)
  3. *Ibid.* p. 556.
  4. P. V. Kane : *History of Dharmaśāstra*, I. p. 151.
  5. *Ibid.* p. 104.
  6. Keith : *A History of Sanskrit Literature* (1928), p. 528.

*Caraka-Saṃhitā* (c. 1st cent. A.D.<sup>1</sup>).

Sūtra-sthāna—i. 36, 37 ; Chaps. 4 and 27.

Śārīra-sthāna—iii. 22-26.

Kalpa-sthāna—V. 3.

*Suśruta-Saṃhitā* (Earlier than Caraka, but exact time unknown<sup>2</sup>).

Sūtra-sthāna—i. 23 ; xxxv. 34-42 ; Chap. xxxviii.

Śārīra-sthāna—ii. 33 ; iii. 18 ; iv. 20-23.

*Kāmasūtra* of Vātsyāyana (c. 500 A.D.<sup>3</sup>).

*Nāmaliṅgānuśāsana* (c. 6th cent. A.D.<sup>4</sup>).

Vānaśadhi-varga—135.

Bhūmi-varga—8.

*Kāmandakīya Nītisāra* (c. 700 A.D.<sup>5</sup>).

xiv. 27-42.

*Kṛṣi-parāśara* (between c. 5th and 11th cent. A.D.<sup>6</sup>).

*Śārṅgadhara-paddhati* (13th cent. A.D.<sup>7</sup>).

Chap. entitled Upavana-vinoda.

*Śukranīti* (Date unknown. Not a very early work).

iv. 2.56, 57 ; iv. 4.91-108 ; 113-114, 123-124.

Besides the above, the following works<sup>8</sup> also contain some materials of the Botanical science: Hemacandra's *Nighaṇṭuśeṣa*, Buddhaghoṣa's commentary called *Sumaṅgala-vilāsinī* and *Dhanvantarinighaṇṭu*.

We briefly set forth below the materials of this science that can be gleaned from the above works. The various kinds of information may be arranged under the following broad heads in accordance with modern Botany :

1. Morphology
2. Plant Physiology

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1. *Ibid.* p. 506.

2. *Ibid.* p. 506.

3. *Ibid.* p. 469.

4. *Ibid.* p. 412.

5. *Ibid.* p. 463.

6. See *Kṛṣi-parāśara*, ed. Asiatic Society, Calcutta.

7. See G. P. Majumdar, *Upavana-vinoda*, p. 1.

8. For other works, see. B. N. Seal: *Positive Sciences, etc.*, p. 169.



### 3. Taxonomy

### 4. Ecology

## 1. Morphology :

This branch of Botany is divided into external morphology and internal morphology or histology. Both these divisions were known to the Indian scientists. The *Atharvaveda* is the earliest work to reveal the knowledge of external morphology. In this Veda (viii. 7) trees of various descriptions are mentioned ; e.g. those having spreading branches (*viśākhāḥ*) and those having leaves with long clusters (*mañjarī*), those which are bushy (*stambinī*), those which expand (*prastṛṇatī*), those having only one sheath (*eka-śuṅga*), those which creep (*pratanvath*), those having many stalks (*aṃśumatī*), those which are knotty or have joints (*kaṇḍinī*). The *Vājasaneyi Saṃhitā* (22-28) and *Taittirīya Saṃhitā* (7.3.20.1) state the different parts making up a plant. These are *mūla* (root), *tūla* (panicle), *kāṇḍa* (stem), *valśa* (twig), *puṣpa* (flower) and *phala* (fruit). Besides these, a tree has *skandha* (corona), *śākhā* (branch), *parṇa* (leaf). Pāṇini mentions the different parts of a tree in different *sūtras*. Under I. 219 Patañjali mentions these together. These are *mūla* (root), *skandha* (trunk), *phala* (fruit), *palāśa* (leaf). According to Pāṇini (IV. 1. 64), plants were named after the characteristics of their leaves, flowers, fruits and roots ; e.g. *śaṅkhapuṣpī* (having flowers white-like conch-shells), *bahumūlī* (having many roots). From Pāṇini (IV. 3. 43) we learn that plants and creatures were called after the names of their flowering seasons ; e.g. *vāsantī kundalatā* as illustrated by the *Kāśikā*. The *Viṣṇupurāṇa* mentions (vii. 37-39) the various parts of trees, viz. sprouts, roots, trunks, leaves and flowers. Parasitic plants growing on trees were not unknown in ancient India. Mushroom is mentioned in Suśruta's *Sūtrasthāna* (Chap. 46). From the mention of *eka-patra*, *dvi-patra*, *tri-patra* and *sapta-parṇa*, it is clear that, in those times, leaves, both single and joint, were known. In accordance with their shape, the leaves were variously designated as *aśva-parṇaka* (*Shorea robusta*), *mūṣika-parṇī* (*Salvinia*) etc.

The different stages in the growth and bloom of flowers are differently named. Before blossoming they were called *koraka*, *kalikā*; when blooming they were styled *kuṭmala*, *mukula*. When in full bloom, they were described as *sphuṭa*, *vikāca*, etc.

The use of words like *bīja-kośa* (seed-vessel), *śaśya* (endosperm) and *bīja-patra* (cotyledon) demonstrates that different parts of seeds were not unknown in those far-off ages.

Gross histology was very well-known. The people knew of the existence of the wood and pith inside the trees. In the *Bṛhadāraṇyaka Upaniṣad* (Chap. iii—Brāhmaṇa ix), the bone, flesh, marrow and nerve of the human body have been stated to be like the wood, *śakara*<sup>1</sup>, pith and fibrous tissue of the tree. Guṇaratna, in his commentary on the six philosophical systems, observes that, like the wounds on human body, those on trees also can be healed up by the application of medicaments.

## 2. Plant Physiology :

In his commentary on the *Śaḍ-darśana-samuccaya*, Guṇaratna holds that, as human body is nourished by milk and other articles of food, so also fertile land and water contribute to the nourishment of trees. Want of proper nutrition impairs both human body and the body of trees. It is with their roots, corresponding to human mouths, that trees absorb the sap; this is why they are called *pādapa* (that which drinks with foot). The intake of food by trees and plants, the distribution of food over their different parts, assimilation of food and the vital rôle played in the matter by wind—these have been beautifully described in the *Mahābhārata* (Śānti-Parvan—Ch. 184). These are fully in accord with the modern science of Botany.<sup>2</sup>

Works like the *Arthaśāstra*, *Bṛhat-saṃhitā* and *Agni-purāṇa* contain rules for planting trees. The people used to believe in

1. The portion just below the bark.

2. See G. P. Majumdar, *Vanaspati*, pp. 31-33.

the benign and malign influences of stars on the planting of trees<sup>1</sup>. Different seasons were supposed to be good for planting different kinds of saplings. According to the *Bṛhat-saṃhitā*, winter is the best season for planting trees whose braches have not grown. Dewy season and the rainy season have been prescribed for planting respectively those trees which have grown their branches and those whose branches have become mature. Besides growing trees from seeds the ancient Indians knew the process of growing trees from the cut branches as well as by grafting the branch of one tree to that of another. Trees grown by planting the branches cut from other trees are called *Kāṇḍa-ropā* in the *Bṛhat-saṃhitā*. Two methods of grafting appear to have been adopted. The branch of one tree used to be grafted to the root or trunk of another tree. While planting trees, sufficient space was kept between them so that the root of one could not be mixed with another resulting in damage to them<sup>2</sup>. Watering has been prescribed for the growth of plants. The proper time for watering is morning and evening in summer and afternoon in winter. In the rainy season, water should be sprinkled only when the earth is dry.

The ancient Botanists knew various methods of keeping the ground fertile and sappy ; they knew quite well that trees and plants drew sustenance from the earth. There are elaborate rules regarding this matter in the *Bṛhat-saṃhitā*, *Agni-purāṇa* and *Upavāna-vinoda*. The *Atharva-veda* was, perhaps, the earliest treatise to contain such rules. An admixture of the prescribed quantities of sesamum, goat's dung, barley-powder, beef and water was regarded as a very effective manure. Cowdung was considered to be a good fertiliser even in remote ages.

The *Bṛhat-saṃhitā* contains detailed procedure of preserving seeds. Seeds, mixed with ghee, are to be thrown into milk. The next day, they are to be separately kept. After repeating this process for ten consecutive days, the seeds have to be

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1. Cf. *Bṛhat-saṃhitā*, Chap. 54.

2. Vide *Agni-purāṇa*, 281/8-9.

smearred with cowdung. Then these have to be heated in pots full of the flesh of boars or deer. Such seeds will lead to the growth of flowering trees. A different method is prescribed for preparing the seeds with a view to growing trees rich in foliage. For the development of trees, particularly mango-trees, the washing of fish is to be sprinkled according to the *Agni-purāṇa* (Chap. 194).

Diseases of plants and their treatment have been dealt with in the *Bṛhat-saṃhitā* (Chap. called *Vṛkṣāyurveda*), *Agni-purāṇa* (Chap. 281) and *Upavana-vinoda*. Guṇaratna, in his commentary, has also dealt with the subject. Excessive increase or decrease of heat and violent wind are some of the causes of the maladies of trees. Yellowish colour of the leaves, under-development of the buds, dryness of the branches, exuding of juice—these are some of the symptoms of their diseases. A decoction of *Kulattha* (*Dolichos biflorus*), *Māṣa* (*Phaseolus radiatus* Var *Roxburghii*), *Mudga* (*Ph. mungo*) *Tila* (*Sesamum indicum*) and *Yava* (barley) is to be applied to roots of trees in order to cure them of barrenness. As preventives of diseases, the following articles are prescribed for application to the roots of trees ; mud mixed with ghee, milk mixed with water and *Viḍaṅga* (*Embelia ribes*) mixed with fish and flesh.

The sleep<sup>1</sup>, waking up and reaction to touch, etc. have been mentioned in Dharmottara's commentary on the *Nyāyabindu* and Udayana's *Kiraṇāvalī*. Guṇaratna, in his commentary, has noticed the reaction to touch on the part of creepers and shrubs like *Minosa pudica*. He has further observed that as the lotus blooms at sunrise and the lily at moonrise, so also some flowers bloom at particular times.

In some treatises,<sup>2</sup> like human beings trees also have been described as having infancy, childhood, youth, old age and death. Guṇaratna mentions 10,000 years as the longest period of life of trees. Their death is attributed to disease and lack of food.

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1. The contraction of leaves at night has been described as their sleep.
  2. e. g. Guṇaratna's commentary.

As stated above, the ancient Indian was aware of the consciousness of trees. In the *Bhāgavata-purāṇa* (iii. 10. 19, 20), trees have been declared to be threefold : *ut-srotasah* (taking sap upwards), *avyakta-caitanya* (with subdued consciousness) and *antaḥsparśa* (with inward sensation of touch)<sup>1</sup>. According to Udayana, trees and plants have very slight consciousness. The Śāntiparvan of the Mahābhārata speaks of their reaction to cold, heat, thunder, good and bad smell.

The ancient Indian had some idea, though not scientifically accurate, of the process of procreation among trees as a result of the union of the male and the female species. The division made by them, of trees into male and female is not based on scientific basis. According to Caraka, *Kuṭaja* has male and female species. Those which have white flowers and bear large fruits are male. Those which have red or yellow flowers and bear small fruits are female.

The idea of rotation of crops is found in the *Taittirīya-saṃhitā* (V. 1. 7. 37) which is a very early text.

### 3. Taxonomy :

In ancient India, trees were designated by terms which referred either to their external features or to their efficacy. For instance a tree with curved flowers was called *Vakrapuṣpa* (*Sesbania grandiflora*), and as it contained property that could cure boils it was called *Vraṇāri* (lit. enemy of boils or sores).

The following classification of trees is found in ancient Indian works :

- (a) Botanical classification
- (b) Classification according to properties
- (c) Classification based on food-value

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1. For the consciousness of trees and plants, see G. P. Majumdar, *Vanapati*, pp. 53-58.

(a) **Botanical classification<sup>1</sup>**

In the *R̥gveda*<sup>2</sup>, the earliest work of the Indo-Aryans, trees have been classified as *phalinī* (bearing fruits), *aphalā* (not bearing fruits), *apuṣpā* (devoid of flowers), and *puṣpiṇī* (having flowers). In the same Veda, the plant-kingdom has been divided into *Vṛkṣa* (tree), *Gulma* (shrub), *Bheṣaja* (medicine), and *Latā* (creeper). *Oṣadhi* is also a Vedic term for a class of trees.

In the *Dharmasūtras*, a two-fold division of trees is discernible. The broad divisions are *Oṣadhi* and *Vanaspati*. Govinda-svāmin, commentator on the *Baudhāyana-dharmasūtra*, has sub-divided *Oṣadhi* into *Vallyauṣadhi* and *Tṛṇauṣadhi*; to the former class belong *Kuluttha*, etc. and to the latter *Vṛhi* (paddy). Pāṇini also appears to classify forests as (1) *Oṣadhi-vana*—those producing herbs, e.g. *dūrvā-vana*, *mūrvā-vana* and (1) *Vanaspati-vana*—those producing timber trees, e.g. *devadāru-vana* (VIII. 4. 8). It should be noted that Pāṇini used the word *Vana* in a two-fold sense, natural and cultivated. Natural forests are like *Puragāvaṇa*, *Miśrakavana*, etc. (VIII. 4.4) and cultivated groves are *Āmravana*, *Ikṣuvana*, etc. From Pāṇini IV. 1. 49 and Kātyāyana's *Vārtika* on it we learn that an ordinary forest was called *araṇya*, while an extensive forest was known as *araṇyāni*.

The following classification of trees and plants is found in the *Manu-smṛti* (1. 46-48) :

- (i) *Oṣadhi*—a tree of this class dies after the ripening of fruits
- (ii) *Vanaspati*—those which bear only fruits, but not flowers
- (iii) *Vṛkṣa*—those which bear either fruits alone or flowers alone
- (iv) *Gulma*—Shrubs
- (v) *Tṛṇa*—lit. grass
- (vi) *Pratāna*—Plants with tendrils
- (vii) *Vallī*—Creepers entwining a support.

1. Only a few of the works are mentioned here. For a detailed account, see G. P. Majumdar, *Vanaspati*, pp. 79-89.

2. X. 97. 15. For Vedic classification of plants, see *Cultural Heritage of India* (R.K. Mission), 3.42 and *Vedic Index*, 1.125.

According to the Sūtra-sthāna (1. 36, 37) or Caraka, trees and plants are of four classes :

- (i) *Vanaspati*—See above
- (ii) *Vānaspatya*—Trees bearing flowers followed by fruits
- (iii) *Oṣadhi*—See above
- (iv) *Vīrudh*—Same as *latā* and *gulma* above<sup>1</sup>.

Suśruta's classification is like that of Caraka.

In the *Bhāgavata-purāṇa* (iii. 10. 19), the classification is as follows :

- (i) *Vanaspati*—See above
- (ii) *Oṣadhi*—See above
- (iii) *Latā*—Corresponding to *Vallī* of Manu above
- (iv) *Tvaksāra*—Those whose bark is very tough ; i.e. bamboo
- (v) *Vīrudh*—Shrubs looking like clumps.
- (vi) *Druma*—Those which bear both flowers and fruits.

From the *Vāyu-Purāṇa* (8. 149-156, 157 ; 69. 338-41) we gather that the plants were broadly divided into two classes—*grāmyāraṇya* and *yajñīya oṣadhis*. *Grāmyāraṇya* probably includes two types, viz. *grāmya* (growing in rural areas) and *āraṇya* (wild). The term *oṣadhi* appears to denote trees in general. From the various references the following classification can be made out :

*Latā*—comprising *vanaspati* (without flowers) and *vṛkṣa* (bearing flowers and fruits)

*Vallī*—comprising *gulma* and *tṛṇa-jāti* (grassy plants)

*Vīrudha*.

The MP. (8.2-3, 154. 304, 161.58, 178.47, 227. 36, 39, 92, 108 etc.) appears to classify the plant-kingdom as follows :

*Vṛkṣa*, *gulma*, *latā*, *vīrudh*, *vallī*.

*Oṣadhi*, a generic name of trees, is divided into *kṛṣṭa* (grown on cultivated land) and *svayamjāta* (growing by themselves).

The remark that some plants and creepers bear flowers, seems to suggest those which do not do so.

The flowers are divided into *jalaja* (growing in water) and *sthalaja* (growing on land).

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1. *Vide* Cakrapāṇi's commentary.

In the *Upavana-vinoda* (verse 43) trees and plants have been divided into *Vanaspati*, *Druma*, *Latā* and *Gulma*. In the same context, these are stated to grow from seed, stem and bulb. The mango-tree, the jack-fruit tree, etc. grow from seeds. The *Sindhuvāra*, *Tagara*, etc. grow from stems. *Rasona*, *Kumkuma*, etc. grow from bulbs. *Dāḍima*, *Mallikā*, etc. grow from seeds and stems. The lotus and some other plants grow from seeds and bulbs.

In Vaiśeṣika philosophy, *Praśastapāda* gives the following classification :

*Tṛṇa*, *Auṣadhi*, *Latā*, *Avatāna*,<sup>1</sup> *Vṛkṣa* and *Vanaspati*.

The following classification is found in the *Vanaūṣadhi-varga* and *Vaiśya-varga* and the *Nāmalīṅgānuśāsana* :

- (i) *Kāṣṭhadāru*—Those which bear fruits and have trunks
- (ii) *Kṣupa*—Those having short roots (*śilphā*) and branches
- (iii) *Latā*
- (iv) *Auṣadhi*
- (v) *Tṛṇa*—bamboo belongs to this class.
- (vi) *Tṛṇa-druma*—Trees like coconut, date and areca-nut trees.

(b) Classification according to properties<sup>2</sup>

Caraka, in *Sūtra-sthāna* (iv), broadly divides trees and plants into Purgative and Astringent. According to him, 600 species belong to the first class and 500 to the second. The latter class has been sub-divided into ten groups (*Varga*)<sup>3</sup>, *Suśruta* has divided (*Sutrasthāna*, xxxviii) the entire plant-kingdom into 37 classes (*gaṇa*).

(c) Classification based on food-value

Caraka's classification is as follows (*Sūtra-sthāna* xxviii)

- (i) *Dhānya-varga* (*Graminaceae*)—those corns which have husk. These have been sub-divided into eleven varieties ; e.g. *Śālī*, *Vṛthi*, *yava*, *Godhūma*, etc.

1. Same as *Gulma*.

2. For the names of trees healing diseases, occurring in ancient Indian works, see K. Biswas and K. Ghosh, *Bhāratīya Vanaūṣadhi* (in Bengali), Calcutta.

3. See G. P. Majumdar, *Vanaspati*, pp. 90-98.



- (ii) *Śamīdhānya-varga* (Leguminosae)—twelve kinds of corns, viz. *mudga*, *māṣa*, etc
- (iii) *Śāka-varga*—18 varieties of vegetables belong to this class
- (iv) *Phala-varga*
- (v) *Harid-varga* (green class)—*ādraka* (*Zingiber officinale*), *mūlaka* (*Raphanus sativus*), *Palāṇḍu* and *Laṣuna* (*Allium cepa* and *Allium sativum*) etc. belong to this class
- (vi) *Āhārayogi-varga*—Oils of sesamum, mustard, etc. belong to this class.

In his *Sūtrasthāna*, Suśruta's classification is as given below : (i) *Śālidhānya*, (ii) *Ṣaṣṭika*, (iii) *Vrihidhānya*, (iv) *Kudhānya-varga*, (v) *Vaidala*, (vi) *Tila*, (vii) *Yava*, (viii) *Śimba*, (ix) *Phala-varga*, (x) *Śāka-varga*, (xi) *Puṣpa-varga*, (xii) *Udbhid-varga*, (xiii) *Kāṇḍa-varga*, (xiv) *Taila-varga* and (xv) *Ikṣu-varga*.

The *Nāmaliṅgānuśāsana* mentions a number of corns and condiments as articles of food and commerce.

The following classification occurs in the *Bhāvaprakāśa* :

- ( i ) *Haritakyādi-varga*,
- ( ii ) *Karpūrādi-varga*
- ( iii ) *Guḍucyādi-varga*
- ( iv ) *Puṣpa-varga*
- ( v ) *Vaṭādi-varga*
- ( vi ) *Āmrādiphala-varga*
- ( vii ) *Dhānya-varga*
- ( viii ) *Śāka-varga*
- ( ix ) *Taila-varga*
- ( x ) *Ikṣu-varga*.

#### 4. Ecology

The growth and development of trees depend, to a great extent, on climate and the nature of the soil. According to nature, soils have been divided by Caraka (*Kalpa-sthāna*, 1) into the following classes and the names of the trees and plants growing on them have been mentioned by him.

I. *Jāṅgala* (Arid)—The trees growing on such lands are called Xerophytes in modern science ; e.g. *Khadira* (*Acacia catechu*). *Sāla* (*Shorea robusta*), *Vadari* (*Zizyphus jujuba*).

II. *Anūpa* (marshy)—Trees growing on such a soil are called Hydrophytes and Hygrophytes ; e.g. *Hintāla* (*Phoenix peludos*).

III. Common soil—Trees of the Mesophytes class grow on such soil, e.g. *Vanaspati*, *Vānaspatya*, etc.<sup>1</sup>

The classification of soils is similar in the *Upavana-Vinoda* and *Suśruta* (*Sūtra-sthana*-35). Some ecological information is found in the *Bṛhat-saṃhitā* (Chap. 54) and *Nāmaliṅgānuśāsana* (*Svarga-varga*).

The ancient Indians used to believe that, in the order of creation, trees and plants preceded the creatures.<sup>2</sup> Botany was regarded as a science to be learnt. This science was utilised in various ways in practical life. By means of botanical knowledge the future growth and availability of crops could be forecast<sup>3</sup>. From certain signs in the trees and plants, excessive rainfall or drought could be predicted. In agricultural operations, the knowledge of Botany served useful purposes, as is borne out by such works as the *Bṛhat-saṃhitā* and *Kṛṣi-parāśara*.

From the foregoing pages it is abundantly clear that botanical speculations started in India in hoary antiquity. In fact, India cultivated this science in howsoever a rudimentary form, at a time when most of the ancient lands, including Greece and Rome, did not have much idea of it. The *R̥gveda* attests the high antiquity of this science in India.

There was remarkable progress in the medical science of India through botanical knowledge. The treatment of diseases with herbs having medicinal properties is borne out by the *R̥gveda*<sup>4</sup> and the *Atharva-Veda*. With the progress of medical

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1. For meaning, see above.

2. Cf. *Chāndogya Upaniṣad*, 1.1.2, and *Rāmāyana* (Uttara-Kāṇḍa, Canto 72).

3. Cf. *Bṛhat-saṃhitā*, Chap. 29.

4. vii. 18 ; x. 145 etc.

science from the *Atharva-veda*<sup>1</sup> down to the age of Caraka and Suśruta, the knowledge of the plant kingdom grew to an appreciable degree. From the *Atharva-veda* we learn that trees and plants were used not only for the preservation and improvement of health but also for the acquisition of sons and warding off the influence of evil spirits.

The science of Botany and trees played a vital rôle in the life of the people in various other ways too<sup>2</sup>. Trees were utilised for making dress, furniture and vehicles. In some religious festivals, the use of certain trees and plants was indispensable. Trees also provided the people with materials for trade and commerce. These were also some reasons why the science of Botany had to be cultivated.

In modern times, the American Botanist, Luther Burbank, made astounding contributions to this science by bringing into existence some botanical products out of a combination of several things<sup>3</sup>. India can justly feel proud of the fact that the creation of Botanical marvels was not absolutely unknown in this country even in the remote past. The *Bṛhat-saṃhitā* (Chap. 54) and *Upavana-vinoda* contain evidence of this fact. For instance, in the latter work, we find a process of producing fragrant flowers in a tree that bears odourless flowers. To the root of such a tree is to be applied earth mixed with fragrant flowers. Then a decoction, made with the bark of the trees called *Dhava* (*Grislea tomentosa* or *Anogeissus latifolia*) and *Khadira* (*Acacia catechu*), is to be sprinkled and the tree should be smeared with ghee and fumigated with the smoke of incense. We are informed that red cotton may be grown in the very tree in which white cotton grows.

1. I/2, 3, 23, 24 ; II/7, 25 ; IV/17, 18, 20, 37 ; V/4, 14, 15 ; VI/85 ; XIX/39, etc.
2. For details, see G.P. Majumdar, *Some Aspects of Indian Civilisation*, etc.
3. For example, he produced a fruit called Primus-berry out of a combination of Black-berry and Rasp-berry. Some such marvels are associated also with the names of Lysenko and Michurin. For details about this topic, see Harwood : *New Creations in Plant Life*, 1905.

In ancient India, the art of grafting plants was well known. The matter has been dealt with by P. K. Gode<sup>1</sup>.

The stately banyan tree figures prominently in Sanskrit literature starting from the Vedic age. It is amusing to find that the people of the age of Brāhmaṇas conceived a regular hierarchy in the kingdom of plants.

Thus the *Nyagrodha* was regarded as a Kṣatriya<sup>2</sup>, the *Aśvattha* as the emperor<sup>3</sup>, *Palāśa* as a Brāhmaṇa<sup>4</sup>. The *Plakṣa* (*Ficus infectoria*) is also looked upon as royal<sup>5</sup>.

Some Brāhmaṇas mention a few aromatic plants and trees, e.g. *juggulu*, scented grass<sup>6</sup> of some types.

The lotus is frequently mentioned in some Brāhmaṇas.

Bāṇabhaṭṭa had an eye for colour. In his two works, *Kādambarī*<sup>7</sup> (K) and *Harṣacarita*<sup>8</sup> (H), he reveals his intimate familiarity with the rich plant kingdom<sup>9</sup>. From his works it appears that he knew of the following species of plants :

1. *Oṣadhi* (herb)—H. 444, 449.
2. *Vīrudha* (weak plant)—H 81, K 117.  
The different types of *Vīrudha*, mentioned by him, are *latā* (e.g. H 42, 411 etc.), *bāla-latā* (e.g. H. 50, 221), *Vana-latā* (H 431), *bhavana-latā* (H 213) and *mārga-latā* (H 54).
3. *Gulma*, *Stamba*, *Veṇī* (shrub)—H 84, 215, 419, 441, K 366.
4. *Vṛkṣa*, *Taru*, *Druma*, *Pādapa* (tree)—H 97, 28, 123, 414, K 74.

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1. *Indian Culture*, Vol. XIII, No. 1, 1946.

2. *Aitareya Brā*, 7.35.5.

3. *Ibid.* 7.35.6.

4. *Śatapatha*, 1.1.1.4, 13.8.4.1.

5. *Aitareya*, 7.35.6.

6. Popularly known as *Khaskhas* now-a-days.

7. Chowkhamba ed. (2nd), 1961.

8. Do. 1964.

9. For details, see P.V. Sharma. Botanical Observations of Bāṇabhaṭṭa, *Sanskrit and Indological Studies (Rāghavan Fel. Vol)*, p. 369 ff).

Among the different types of trees are *Vanaspati* (K 74), *Mahā-vanaspati*, *Mahātaru*, *Tuṅgataru* (H 161, 162, K 200) and *Kṣiri-vṛkṣa* (milk-exuding tree—H 444, K 199).

Bāṇabhaṭṭa's works testify to his knowledge about the different parts of a plant. Thus, he mentions :

*Aṅkura* (*Praroha*)—H 28, 42, 253

*Asthī* (stone)—H 407

*Bīja* (seed)—H 84

*Kāṇḍa* (root)—K 121, H 429, 432

Synonyms *Mūla*, *Supha*, *Jata* were also mentioned.

*Kalikā*—H. 17

The synonyms *Korka*, *Mukula*, *Kuḍmala* also occur.

*Kusuma* (flower)—H 33

Clusters of flowers are called *Guccha*, *Stabaka*, parts of a flower like *Kośa* (interior), *Dala* (petal) *Kesara* (stamen), *Dhūli* (pollen) etc. are mentioned.

*Pallava* (leaf)—H 35

The following synonyms are also mentioned : *Dala*, *Parṇa*, *Patra*.

*Phala* (fruit)—H 37, K 53 etc.

*Sarasa phala* (juicy fruit), *Śalāṭu* (unripe fruit) etc. are mentioned. Also mentioned are *Phala kosi* (legume, outer cover), *Sphuṭadbija* (Capsular).

Bāṇa knows the places where different plants grow. These are *Vana-aṭavī* (H 36, K 37.3 etc.), *Mahāṭavi* (H 441), *Vanānta* (H 296), *Vanagrāmaka* (H 98), *Ārāma* (H 164), *Udyāna* (H 79), *Upavana* (H 249), *Vāṭikā* (H 175).

The plants at the entrance were called *Pradeśa-pādapa*.

Bāṇa had a keen awareness of the appeal that the plant kingdom made to a person. The rustling sound of dry leaves appealing to the ear is mentioned in H 82, 83. The pleasant touch of the lotus (H 48), jasmine flowers (H 455) etc. is described. The unsteady nature of banana leaves and the sharp points of the *Kuśa* grass have caught the vision of the poet (K 125). Bāṇabhaṭṭa, a lover of colours, has mentioned the white, yellowish white, grey, saffron, yellow, green, red black, blue colours of plants and flowers in different contexts ; this

shows the wide range of his familiarity with these species. The sweetness of fruits like grapes (*drākṣā*) has appealed to his taste. *Candana*, *Elā*, etc., having fragrance, have been mentioned by him.

The regions of Vindhya hills and the Himalayas have been mentioned by him as the principal habitats of plants.

That Bāṇabhaṭṭa had a keen power of observation is indicated by the fact that he states the changes that take place in the plants in different seasons. The following are some of the passages throwing light on this matter :

H 33, 34, 38, 79-88, 142-143, 177, 193, 215, 334, 393, 405.

K 33, 204, 242, 267, 422.

Below are arranged in alphabetical order the names of plants found in ancient Sanskrit literature :

Abaya	Agastiphala
<i>Breassica yuncea</i>	MP 96.9
AV iv 35.5	Agnijavālā
Used against supernatural agencies	AK 112.125
Abdaka	Agnimantha
MP 118.6	AK 97.66
Abhaya (Abhayā)	KS IV. 1.29
AK 122.165	Agnimanya
AK 95.59	MP 217.79
MP 217.75	Recommended for storing:
It is recommended in MP for storing in a fort.	in a fort
Abbīru	Agnimukhi
AK 106.101	AK 91.43
Adhyāṇḍā	Agniśikhā
<i>Mucana pruriens Phyllanthies Winaria</i>	<i>Glorioya superba L.</i>
<i>P. niruri</i>	AK 110.119
SB xiii. 8, 1, 16	115.137
Adara	Aguru (Agaru)
<i>Zingiber officinale</i>	<i>Aquilaria agallocha</i>
AV iv. 35.5	R VIII. 71, XIX. 41
Abja (Same as Puškara, Kamala, Ambhoja, Aravinda).	AK 96.63
R IV. 61	RS V. 12
RS vi. 33	VP 75.32
Āḍhakra	MP 161.63
VP 8.152	Mentioned in VP in connection with Śrāddha.
Āḍityamustaka	Aheru
MP 118.17	AK 106.102
Agada	Aila
AK 114.50	MP 217.66
Agama	Recommended for storing:
AK 80.5	in a fort.
	Ailāka
	MP 96.7

Airaṇḍaka	Ākrīḍa
MP 217.46	AK 80.3
Recommended for storing in a fort.	Akṣa
Airāvata	<i>Terminalia balerica</i>
AK 90.38	The seeds of its fruits appear to have been strung together to be used as rosaries.
UV 50	
Ajagandhikā	Akṣīva
AK 116.140	AK 87.31
Ajahā	Akṣoṭa (or Akṣoṭaka)
AK 102.87	<i>Aleurites triloba</i> ,
Ajāji	MP 118.6, 217.53
MP 62.9	VP 38.66
Ajamodā (Ajamoḍa)	AK 87.29
(Ajmada <i>Carum roxburgh-</i> <i>iana Benth.</i> ).	In MP recommended for storing in a fort.
AK 117.145	
KS IV. 1.6	Āla
MP 118.40, 217.63	Weed of cornfield.
In MP, recommended for storing in a fort.	AV vi. 16.3
Ajarūṣa	Alarka
AK 107.104	AK 101.81
Ajaśṛṅgi	Alābu (Alābu)
<i>Odina Wodiar. Gymnema</i> <i>sylvestre.</i>	<i>Lagenaria vulgaris.</i>
AV iv. 37	AV viii. 10, 29, 30 ; xx. 130.
AK 111.120	<i>Maitrāyaṇī Saṃhitā</i> , iv. 2.
In AV supposed to destroy demons.	13 vi. 79.17
Ajjhaṭā	KS IV. 1.29
AK 113.127	AK 120.156
Ājjukan	UV 8
UV 13	MP 118.27
Ākalla	In Vedic literature, vessels are stated to be made of it.
MP 118.11	
Ākanda	Alaśālā
<i>Calotropis procera</i>	Grain Creeper
UV 26	AV vi. 16.4



- Āli-(Tree ?)  
 AK 80.4  
 Alpamāriṣa  
 AK 115.136  
 Āluka  
 UV 43  
 KS IV. 1.29  
 (Prācīna) Āmalaka (Āmalakī)  
 or Amalā  
*Phyllanthus emblica*  
 Jaiminiya Upaniṣad Brāh-  
 maṇa i. 38, 6  
 Chāndogya Upaniṣad, vii.  
 3.1  
 Kad. 53  
 H 16  
 UV 27  
 KS IV. 1.7  
 VII. 1.26, VII. 2.36  
 AK95. 58  
 UV 9  
 MP 96.7, 118.4, 7, 161.61,  
 217.57, 75  
 Āmaṇḍa  
 AK 93. 52  
 Amāmsī  
 MP 118.38  
 Ambaṣṭha  
 AK 98.72  
 102.85  
 116.141  
 Amblikā  
 Ambuja  
 VP 94.37  
 MP 62.24  
 RS III. 20, IV. 4, 5 ; VI.  
 14  
 K XI. 25, XIV. 13  
 AMBHOJA (See Abja).  
 Amburuha  
 RS VI. 7  
 Amlāna  
 MP 60.38, 81.38  
 Amlavetasa  
 MP 217.55  
 AK 116.141  
 Recommended for storing  
 in a fort.  
 Āmlika  
*Tamarindus indica* L.  
 vi. 61.5.14  
 Amblikā  
 AK 91 44  
 Ambuja (See Abhja)  
 R XIII. 60  
 Āmiṣī  
 AK 114.134  
 Amlāna  
 AK 99.47  
 Amogha  
 AK 94.55  
 107.106  
 Āmra (Also see Cūta, Sahakāra)  
*Mangifera indica*  
 MC 18  
 A VI. p 192  
 K VIII. 78  
 RS VI. 23  
 AK 88.33  
 UV 27  
 VP 69.307-8  
 MP 96.11, 187.29, 257.8  
 Āmrātaka  
 AK 86.27  
 UV 8  
 KS IV. 1.29

- VII. 2. 33, 46  
MP 96.,5 118.8, 217.55-56
- Amṛta**  
(Amṛtaphala—*phyllanthus emblica* L)  
AK 95.58, 59  
101.83  
MP 217.65  
In MP, recommended for storing in a fort.
- Amūla**  
*Gloriosa Superba Cascata Sp.*  
AV V. 32.4  
Described as rootless.
- Ananta**  
(Anantalatā—*Antigonon leptopus* Hook and Arn.)  
AK 103. 92  
115.137  
121.159  
MP 217.76
- Anāryatikta**  
AK 117.143
- Āṇḍika** 16  
*Nymphaea alba*  
AV IV. 35, 5 ; 17, 16  
Edible plant leaf. Root egg-shaped.
- Āṇḍira**  
MP 217.65  
Recommended for storing in a fort.
- Āṅgāratṭṇa**  
KS VII. 2.45
- Āṅgāravallari**  
AK 93.49  
AK 103.90
- Āṅghripaṇḍikā**  
AK 104.93
- Āṅguṣṭhika**  
UV 26
- Āñjana**  
MP 118.12, 217.77  
Recommended for storing in a fort.
- Āñjanakeśi**  
AK 113.130
- Āṅkola**  
UV 22
- Āṅkoṭa**  
AK 87.29
- Āṅkurāsphoṭā**  
MP 217.73  
Recommended for storing in a fort.
- Aṇu**  
*Panicum miliaceum*  
*Vājasaneyi Saṃhitā*, xviii. 12  
*Bṛhadāraṇyaka Upaniṣad*, vi. 3, 13  
VP 8.150
- Āpāmārga**  
*Achyranthes aspera* L  
AV. iv. 7, 6 ; 18.7 ; 19, 4 ; vii. 6, 2  
*Vājasaneyi Saṃhitā*, xxxv. 11  
*Taittirīya Brāhmaṇa* i. 7, 8, SB v. 2.4, 14 ; xiii. 8, 4, 4  
*Nirukta*, iv. 17.2  
vi 61.14  
AK 103.89  
UV 26  
MP 93.27, 215.31
- Aparājita**  
*Clitoria ternatea* L.  
AV ii. 27, 3

AK 107.104	Arimeda
119.150	vi 61.14
In AV it is stated to be	AK 93.50
conducive to prosperity	Ariṣṭa (Ariṣṭaka)
and long life.	<i>Melia azadirachta</i> L
Āra	vi 61.2
Pan VIII. 4.5	AK 87.31
Āragvadha	96.62
AK 85.23	118.149
UV 33	UV 7
Aralu	MP 118.7, 24 ; 217.53
<i>Oroxylum indicum</i>	Arjaka
AV xx. 131.17	AK 100.80
AK 95.58	Arjuna
Axles of chariot were some-	<i>Terminalia arjuna</i>
times made of its wood.	R XVI. 51, XIX. 37
Ārāma	RS II. 17, III. 13
Name of a tree ?	AK 92.45
AK 80.2	123.168
Arāṭaki (Aratu)	H 161
<i>Prosopis spicigera</i>	UV 10
<i>Accacia suma</i>	MP 118.6, 161.56, 186.40,
AV. iv, 37.6	217.76, 257.11
Aravinda (See Abja)	Arka
K 1. 32, III. 56	<i>Calotropis gigantea</i>
A III 4	AV vi. 72.1
R I. 43, VI. 13, XIII 23,	SB ix. 1, 1, 4.9
XIV 50, 5	vi 61.14
RS IV. 13.	KS VII 2.36
K IX 1, 20 ; XIII 12, 17 ;	UV 3
XVII 49	MP 62.24, 68.18, 93.27
Ardhacandrā	Arkāhva
AK 108.109	AK 101.81
Ardraka	Arkapaṇṇa
<i>Zingiber officinale</i> Roscoe	AK 101.81
UV 9	Ārtagala
Ārevata	AK 99.75
AK 85.24	

- .Aruṇā  
 AK 106.100  
 .Arundhati (= Sahadevi)  
*Sida cordifolia*. *S. rhombifolia*  
 AV iv. 2, 1 ; v. 5, 5, 9 ; vi. 59. 1, 2 ; vii. 7, 16 ; xix. 38  
 Stated to have heating properties and increase cow's milk. Used for protection of cattle.  
 .Aruṣkara  
 AK 91 43  
 Āsana  
*Terminalia tomentosa* Bedd.  
 AK 91.44  
 UV 8  
 MP 118.13, 217.76, 255.21, 257.8  
 .Aśmagandhā  
*Withania somnifera*  
 ŚB xiii, 8, 1, 16  
 .Aśmantaka  
 UV 21  
 .Aśmapuṣpa  
 AK 111. 123  
 .Aśoka (Same as Kañkeli)  
*Jonesia asoca* Roxb  
 MC 86  
 V II. 7, IV. 62, V. 3  
 A VII, p. 240  
 K III. 26, 53  
 R VII. 21, VIII. 62, 63, IX. 28, XIII. 32  
 Mal III. pp. 34, 35, verse 5, p. 40, p. 41, p. 43, verse 12, p. 45, p. 46, p. 50, p. 51, p. 53 ; IV. p. 62, p. 70, p. 77, verse p. 80, p. 81, p. 82, p. 83, p. 84, p. 85, p. 92  
 RS. VI. 5, 16  
 Supposed to blossom at the stroke of the foot a woman.  
 Its leaves are stated to be used by women as ear-decoration.  
 AK 97.65  
 UV 3  
 MP 60.38, 62.24, 118.11, 161.56, 66, 180.43 etc.  
 Aśokarohiṇī  
 AK 102.86  
 Āsphoṭa  
 AK 101.81  
 UV 14  
 AK 98.70  
 107.104  
 Asthibija  
 UV 14  
 Aśvakarṇa (ka)  
*Shorea robusta* Gaertn.  
 AK 92.45  
 UV 10  
 Aśvattha  
*Ficus religiosa*  
 RV i. 164.20 ; x. 97.5  
 AV iii. 6, 1 ; iv. 32.4 ; vi. 11.1  
 SB xi. 5, 1.13  
 AB 7.35.6  
 G I. 25  
 Pan IV. 3.48  
 AK 83.18

- AK 85.21  
UV 3  
VP 35.38  
According to VP, its sticks are recommended for use in *Śrāddha*. It symbolises the spirit of kingship.  
In RV X. 97.5 vessels are stated to be made of its wood.  
In AV vi. 11.1 its wood is said to be used for kindling fire. In AV iii. 6 it is stated as starting life as an epiphyte on Khadira, sometimes strangling it. In RV i. 164.20 its berries are stated to be eaten by birds.
- Aśvabāla (Aśvabāra)  
*Saccharum spontaneum*  
*Maitrāyaṇi Saṃhitā*  
iii. 7.9  
*Kāṭhakaḍa Saṃhitā*  
XX iv. 8  
*Kaṣiṭhala Saṃhitā*  
xxxviii. 1  
SB iii. 4.1, 7
- Aśvavati  
RV x. 97.7  
An unidentified medicinal plant.
- Atasi  
*Crotolaria retusa* L.  
UV 33
- Aṭarūṣa  
AK 107.104
- Atibalā  
*Sida rhombifolia* L.  
UV 22
- Aticarā  
AK 117.146
- Aticchatrā  
AK 119.152  
AK 123.167
- Atimukta  
*Aganosma caryophyllata*  
V II. 7.1  
A III. p. 95  
Mal IV. 13  
RS VI. 17  
Described as climbing a mango-tree. Bowers appear to be formed with *Atimukta* creepers.
- Atimuktaka  
AK 86.26  
AK 98.72  
UV 13
- Atisaurabha  
AK 88.33
- Ativiṣa  
AK 106.100  
UV 13
- Aukṣagandhi  
A fragrant plant.  
AV. iv. 37.3
- Avadāha  
AK 122.165
- Avakā  
*Blyxa oryzetorum*  
AV viii 7, 9 ; 37, 8-10  
*Taittirīya Saṃhitā*, iv, 6, 1, 1  
V 4, 2, 1 ; 4.3

<i>Vājasaneyī Saṃhitā</i> , X	KS II. 7.18
vii.4 ; XXV. 1	Pan V. 2.24
<i>Maitrāyaṇī Saṃhitā</i> , ii 10.1	AK 119.151
SB vii 5.1, 11 ; viii 3.2, 5 ;	VP. 38.66-70
ix 1.2, 20, 22 ; xiii 8.3.13	MP 96.6, 118.17, 187.33
Avakeśin	The staff of a Vaiśya
AK 81.7	Brahmacārin is made
Avākpuṣpī	of the wood of this tree.
AK 119.153	Bahupādika
Avalguja	KS VII. 2.41
AK 105.96	Baja
KS VII 2.31	<i>Brassica Sp.</i>
Āvali	AV viii. 6, 3, 6.7.24
AK 80.4	Used against the demon of
Avandhya	disease.
AK 81.6	Baka
Avegi	MP 217.79
AK 115.137	Bakula
Avigna	<i>Rottlera tinctoria</i> , <i>Mimusops</i>
AK 97.68	<i>elengi</i> , <i>Mesua ferrea</i> .
Avyāṅgā	R VIII. 64, IX 30, XIX. 12
AK 102.87	RS II. 24
Avyathā	AK 97.65
AK 95.59	H 57
117.146	MP 118.16, 180.25, 161.56,
Badara (Badarī)	255.23
<i>Zizyphus Sp.</i>	Bāla (Balā ?)
<i>Kāthaka Saṃhitā</i> , xii 10	AK 111.122
<i>Maitrāyaṇī Saṃhitā</i> , iii. 11.2	MP 217.44
<i>Vājasaneyī Saṃhitā</i> , xix.	Recommended for storing
22.90 ; xxi. 30	in a fort.
<i>Taittirīya Brāhmaṇa</i> i. 8	Balbaja (Balvaja)
5, 1	<i>Elensine Indica</i> . <i>E. Coracana</i>
SB V, 5.4.10 ; xii. 7.1.3 ;	RV viii. 53.3
2 ; 9 ; 9, 1.8 etc	AV xiv 2, 22, 23
<i>Jaiminīya Brāhmaṇa</i> , ii.	Tai Sam ii. 2, 8.2
156.5	Kāth. Sam x. 10
Vas 1.2.38	Mait Sam ii. 2.5

- In RV baskets and other things are said to be made from it. In Kāth. Sam it is stated as used for sacrificial litter fuel.
- Vp 75·61  
Ap 1. 21. 1  
AK 122·163  
One of the articles in which trade is allowed. According to VP., it is a taboo in *Śrāddha*.
- Balakosira  
KS IV. 1. 7
- Bāṇā  
AK 99 75  
MP 60·38, 81·28, 118·4
- Bandhujīva  
*Pentapetes phoenicea*  
K VIII. 40  
R XI. 25  
RS III. 24  
UV 33  
MP 62. 22
- Bandhūka  
RS III. 5, 25  
AK 99. 73  
H 357  
MP 118·18
- Barbarā  
AK 116. 140
- Bayeḍā  
(*Vaheḍā Terminalia belerica* Roxb.)  
UV 55
- Bhadradāru  
MP 161·61
- Bhadramtā sn  
Kad 83
- Bhallātaka (Bhallāṭa)  
*Semecarpus anacordium* L.  
UV 33  
MP 118·23, 217·62  
In MP, recommended for storing in a fort.
- Bhaṇḍī  
VP 69.307-8  
Its flowers are taboo in *Śrāddha*.
- Bhāṇḍīra  
MP 118·30
- Bhaṇḡa  
*Cannabis sativa*  
RV ix ; 61, 13  
Sāṅkh. Āran. xii. 19  
AV xi. 6.15  
In RV. it is an epithet of Soma.
- Bhaṇṭāki  
AK 109.114
- Bhāradvājī  
AK 110.117
- Bhārgi  
UV. 21
- Bhṛṅga  
KS VII. 2.31
- Bhṛṅgarāja  
*Wedelia calendulacca* Less.  
AK 119.152  
MP 217.71  
In MP, recommended for storing in a fort.
- Bhūmipuṣpa  
MP 118·4, 217.39, 77

**Bhūnimba**

AK 117 143

**Bhūrja***Betula bhojpattra*. K I. 7,

55, V II. 11·2, 17·10

18.1 4, 9.19 1, 3 R IV.

73

Its bark is stated to be  
used as writing material.Its soft bark is stated to  
be used as garment.

H 386

MP 118·4, 217·39, 77

**Bhūruṇḍī**

AK 98.70

**Bhūstrṇa**

MP 118·39, 217·64

Recommended for storing  
in a fort.**Bhūtumbī**

MP 217·69

Recommended for storing  
in a fort.**Bibhitaka**

AK 95.58

UV 3

MP 118·4, 217·75

In MP, recommended for  
storing in a fort.**Bijapūraka (Bijapūra)***Citrus medica*.

Mal.

AK 100.79

UV 10, 13

MP 118·20, 161·64, 217·56

Its fruit is regarded as auspici-  
ous and worthy of presen-  
tation.**Bilva***Aegle marmelos*.

AV XXI. 136 3 A. B. ii. 1

S. B. XIII. 4 4, 8 etc.

Mait Sam, iii. 9. 3

Tai Sam. ii. 1.8 1.2 (Sacr-  
ificial post made of it.)Sāṅkh Āran. XII. 20 *et. seq.*  
(amulet made with it).

B 1·14·10

G 1·25

Vas XXVII. 12

Vi 61.14

Pan IV. 3.136

AK 88.32

UV 3, 20

MP 56·16, 60·34 etc.

Recommended for storing  
in a fort.

VP 69·307-8

According to VP, its sticks  
are good for *Śrāddha*.  
The use of a vessel,  
made of its wood, is  
supposed to lead to the  
acquisition of wealth.**Bilvasarja**

UV 25

**Bilvāṭakī**

MP 218·2

It is an antidote to poison.

**Bimba***Coccinia indica* cogn.

Jaim Up Br iii. 5, 6

MP 118·20

A beautiful woman's lips  
are compared with ripe  
*Bimba* fruits.



Bimbikā	Vāj Sam XVIII. 1 2
AK 116 139	VP 8·152
Bisa	Caṇḍā
<i>Aconitum napellus</i> L.	<i>Andropogon aciculatus</i>
V IV. 31	AV VI. 139·3
K IV. 29, VIII. 35	AK 113 129
Supposed to constitute the	Candana
bow-string of Cupid.	<i>Santalum album</i> L.
Bisinf	K VIII. 25
Mal V. p 84	R IV. 48, 51 ; VI. 64 ; VIII.
Brāhmaṇī	71 ; X. 42 ; XI. 64
AK 103 90	A IV. 144 ; VII. 18
Brāhmi	RS I. 4, 6, 8 ; II. 21 ; III.
<i>Herpestis monniera</i> H.B. & K.	20 ; V. 3 ; VI. 6, 12, 32
AK 115 138	Kad 417
Bṛhatī	MP 64·16, 118·6 etc.
AK 104, 94	Serpents are stated to
KS VII. 2.28	entwine this tree which is
UV 52	spoken of as growing on
MP 96·8, 118·28, 217·44	the Malaya mountain.
Seeds, smeared with ghee	Cāṅgerī
mixed with the powder	AK 116.141
of <i>Bṛhatī</i> and <i>Tila</i> , are	Carmakaṣā
stated to sprout quickly.	AK 117.144
Buka	Caturaṅgalā
AK 101 82	MP 217·72
Cakramardana	Cavya (Cavyaka)
MP 118.21	MP 217·62 118·15
Campaka	Chatra
<i>Michelia champaka</i> L.	MP 217·47
RS VI. 29	A kind of grass (?)
AK 96.64	Chatrā
H 27	AK 123.167
MP 118·14, 18 ; 161·57,	UV 23
255·23	Chatrāka
UV 3	See Kavaka
Caṇaka	Ciñcā
<i>Cicer arictinum</i>	UV 4

Ciñcini	Blossoms are fragrant.
UV 23, 46	The summit of the
A sacred plant	Āmrakūṭa mountain is
Cirbhīṭa	stated to abound in <i>Cūta</i>
MP 96. 10, 118·28	trees.
Ciribilva	RS VI. 1, 3, 14, 15, 30
MP 118·22	UV 43
Citraka	<b>Dāḍima</b>
MP 161·59, 217·62	AK 97 65
Citraparṇī	KS VII. 2.28
AV ii. 25·3	Kad 53
With spotted leaf, used as	UV 3
protection of foetus.	MP 96·6, 118·18, 154·520,
Citravalliphala	161·64, 217·55, 255·23
MP 96·10	In MP recommended for
Corakatumbi	storing in a fort. It is
KS V. 6.25	supposed to be auspicious
Cukraphala	if it grows near a house.
MP 217·57	Damanaka
Cūta	KS IV. 1.29
(See Āmra)	Dantaśaṭha
V. II 7	MP 217·57
A IV. 12, V. 1, VI. pp. 189,	Recommended for storing
189, verses 4, 8, p. 210	in a fort.
K I. 27, II. 64, III. 27 30,	Dantikā
32, IV. 14, 38	AK 117.145
R VIII. 21, XIII. 34, XIX.	MP 217-71
43	In MP recommended for
Mal. III. 4, pp. 45, 49,	storing in a fort.
IV. 2	Danti
KS II. 10·8	UV 21
MP 161·56	Dantitvak
Used in the worship of	MP 217·69
Cupid. One of Cupid's	Recommended for storing
arrows is made of its	in a fort.
blossoms. A mango-leaf	Darbha
is fancied as the lip of	<i>Eragnostis cynosuroides</i>
the goddess of spring.	<i>E. tenella</i> = <i>E. ciliaris</i>

- RV i. 191·3  
 AV VI. 43, 2 (used for 7·20  
 pacifying anger)  
 VIII. 7·20  
 X 4·13  
 XI 6·15  
 XIX 29·1 etc.  
 A II. pp. 75, 84, III. p. 112  
 IV. 7, p. 137  
 R XIII. 25, 39 ; XIV. 69  
 UV 20  
 VP 75·17-8, 83, 79  
 Used for covering the  
 sacrificial altar as well as  
 in *Śrāddha*.  
**Darbhareṇukā**  
 MP 217·75  
 Recommended for storing  
 in a fort.  
**Dāru**  
 Pan IV. 3 152  
**Dāruharidrā**  
 AK 106 102  
**Dārvikā**  
 MP 217·49  
 Recommended for storing  
 in a fort.  
**Daśavṛkṣa**  
 Av II. 9·1  
**Devadāru**  
*Polyalthia longifera*  
 Me 113  
 K I. 15, 54 ; III. 44 ; VI. 51  
 R II. 36, 56 ; IV. 76  
 KS VII. 2 41  
 AK 94·54  
 MP 274·32  
 Exudes *Kṣīra* (milk-like  
 sap.) which perfumes the  
 breeze. Its height is the  
 model of the tallness of  
 a person.  
 Elephants are tied to it.  
**Devatāḍa**  
 AK 98 69  
**Dhanaka**  
 MP 118·7  
**Dhanvana**  
 MP 217·46  
 Recommended for storing  
 in a fort.  
**Dhānya (Dhānyaka)**  
*Oryza sativa*  
 Vas II. 45  
 UV 14  
 MP 62·9, 217·63, 80  
 In MP recommended for  
 storing in a fort.  
**Dhānyāka**  
 MP 217·50  
 Recommended for storing  
 in a fort.  
**Dhātaki**  
*Wood fordio floribunda*  
 Salisb.  
 AK 112 125  
 MP 118·22, 217·76  
 In MP, recommended for  
 storing in a fort.  
**Dhātri**  
 UV 11  
 It is good for one to plant  
 this tree.  
**Dhattūra (—Ka)**  
*Datura fastuosa L*  
 AK 100 78

- KS VII. 1 24  
 VII. 2 42  
 MP 95·24  
 KS states that one becomes unconscious as a result of eating its fruit.
- Dhava**  
*Anogeissus latifolia*  
 AV VI. 5 5 (used for healing up wounds)  
 UV 10  
 MP 118·8 161·56
- Drākṣā**  
*Vitis vinifera* L.  
 H 161  
 R IV. 65  
 AK 108 108  
 UV 3  
 Kad 53  
 MP 96·8, 118·24  
 Wine is produced from its fruits.
- Drukāla**  
 MP 161·62
- Dugdhikā**  
 AK 106 100  
 UV 33
- Duḥsparśā**  
 MP 217·72  
 Recommended for storing in a fort.
- Dumura**  
*Ficus Cunia* Ham.  
 UV 3
- Dūrvā**  
*Cynadon dactylon* Pers.  
 RV x. 16 13 ; 134·5 ; 142·8  
 Tait. Sam. iv. 2 9 2 v. 2 8 3
- Vāj. Sam. xiii. 20  
 AB viii. 5·8  
 SB iv. 5 10·5 vii. 9·2 10·12 etc.  
 AB 8 37 4  
 A IV. p. 127  
 K VII. 7, 14  
 R VI. 25 ; XVII. 12  
 AK 121·158  
 MP 93·27, 217·69  
 Auspicious and used in religious rites. Used in garlands of flowers.  
 In MP recommended for storing in a fort. In RV. X. 16·3 stated to grow on damp soil.
- Durvāra**  
 VP 75·39  
 Mentioned in connexion with Śrāddha.
- Elā**  
 AK 112 125  
 Kad 359  
 UV 43
- Elālatā**  
*Alpinia cardamomum*  
 R IV 47 ; VI. 64
- Elāparṇi**  
 AK 116 140
- Elāvati**  
 MP 118·9
- Elāvālukā**  
 AK 111 121
- Eraṇḍa (-Ka)**  
*Ricinus communis* L.  
 Sāṅkh. Āra. xii. 8  
 AK 93·51  
 UV 63

- MP 217·65  
**Gairikā**  
 MP 217·77  
**Gambhārī**  
 (Gambhar—*Gmetina arborea*)  
 AK 89 36  
**Gaṇḍa-dūrvā**  
 UV 53  
**Gandhamūli**  
*Abelomoschas esculentus*  
 Man.  
 AK 119 154  
**Gandhanākuli**  
 MP 217·72  
 Recommended for storing  
 in a fort.  
**Gandhapāṭala**  
 MP 62·24  
**Gaṇḍira**  
 AK 120 157  
**Gaṇikārikā**  
 AK 97 66  
**Gardabhāṇḍa**  
 AK 91 43  
**Garmut**  
 Tait. Sam. ii. 4 4 1 2  
 Kāth. Sam. xiii  
 Maitr. Sam. ii. 2·4  
 Wild bean  
**Garuḍa-vega**  
 UV 24  
**Gavedhuka**  
 (V. L. Gavedhukā Gāvid-  
 hukā Gavidhuta)  
*Coix lachryma*  
 Tait. Sam. i. 8·7·1 ; 9·2 v.  
 4·3, 2  
 S. B. V. 2·9, 13 ; 3, 1, 10 ;  
 xiv. 1·2·19  
 T. B. 1.7.3.6  
 Mai. Sam. ii. 6. 5  
 iv. 3·8  
 Vaj. Sam. XV. 5  
**Ghana**  
 UV 187  
 MP. 217·79  
 One of the plants which  
 are crushed, mixed with  
 milk and water and  
 sprinkled over a tree  
 struck by thunder.  
 Recommended in MP for  
 storing in a fort.  
**Ghaṇṭāpāṭali**  
 AK 90 40  
**Girikarṇikā**  
 UV 5  
 KS VII. 2. 37  
**Girimallikā**  
*Holrrhena antidysenterica*  
 Wall,  
 AK 97 67  
**Godhūma**  
*Triticum vulgare* vill  
 Mail Sam i. 2·8  
 Vāj Sam xviii 12  
 xix. 22, 89  
 xxi. 29  
 SB v. 2.1.6 xii. 7.1.2 ; 2.9 ;  
 9.1.5  
 Br Up vi. 3 22  
 TB i. 3 7 2  
 vi. 80 1  
 UV 234  
 VP 8 150  
 MP 266.12

Goḍumbā	H 170
AK 120 157	MP 118 21
Gokṣura	Gundra
AK 105 99	UV 25
UV 25	Guñjā
Gostani	AK 105 98
UV 155	H 420
It is stated to thrive with	UV 154
the dung of cocks, mixed	Guñjātaka
with some other things,	MP 118·44, 217·51
applied at its root.	Recommended for storing
Govalli	in a fort.
MP 217 50	Guvāka (Also Gubāka)
Recommended for storing	<i>Areca catechu</i> L.
in a fort.	AK 123 169
Granthiparna	Hālidhim
AK 114 133	UV 13
Gṛñjana	Hallaka
Vas XIV. 33	UV 10
MS V. 5	Hañjikā
YS I. 7 176	MP 217 65
AK 118 149	Recommended for storing
VP 78 12·4	in a fort.
According to VP, it should	Hareṇukā
be avoided in <i>Śrāddha</i> .	MP 217·73
Guḍuci	Recommended for storing
AK 101 83	in a fort.
UV 26	Hareṇuemāṃsi
MP 217 74	MP 218·11
In MP, recommended for	An antidote against poison.
storing in a fort.	Haricandana
Guggula (u)	MP 92·6
<i>Bulsamodendron mukul</i>	Haridrā
AV xix. 38 (Amulet for	<i>Curcuma long</i> L.
various blessings)	AV i. 24 2 (remedy against
vi. 61 4	leprous spot)
vas XI. 66	G I. 23
AK 88 34	H 420

Kad 218	Recommended for storing
UV 9	in a fort.
MP 118 16, 161 57, 217 68	Hiṅgupatrikā
In MP, recommended for	MP 217 66
storing in a fort.	Recommended for storing
Haridrava	in a fort.
MP 257·9	Hintāla
Recommended for building	AK 124 170
purposes.	UV 10
Haridru	MP 118 21
<i>Cedrus libani</i>	Hiriveram
SB xiii. 8 1 16	UV 13
Haridrūma	Hrivera
MP 118 5	MP 217 68
Haritaki (ka)	Recommended for storing
<i>Terminalia chebula</i> Retz.	in a fort.
Pan IV 3 167	Idhma
AK 95 60	AK 82 13
UV 9	Ikṣu
KS VII. 2 460	<i>Saccharum officinarum</i>
MP 217 66	R IV. 20
In MP recommended for	RS V. 1, 16
storing in a fort.	AK 122 164
Haritāla	H 410
MP 217 64	UV 33
Recommended for storing	KS IV. 1.6
in a fort.	MP 60 8-9 62 28, 118 36 etc.
Hastikarṇa	VP. 49 28-30
UV 25	In VP, it is recommended
Hijjala	for use in <i>Śrāddha</i> . In
AK 96 61	MP (60 8-9) regarded as
Hilamocikā	auspicious. In it it is
<i>Enhydra fluctuens</i> Lour	recommended for storing
AK 121 158	in a fort. A poor
Himavara	Brahmin traveller, steal-
MP 118 19	ing two sugarcanes, does
Hiṅgu	not commit any offence.
MP 161 62, 217 63	

- Ikṣugandhā  
 AK 105 99  
 107 105  
 108 110  
 122 163
- Ikṣura  
 AK 107 106
- Ikṣvāku  
 AK 120. 156
- Indīvara  
*Nymphaea lotus*  
 R VI 65  
 RS II 12  
 UV 10  
 AK 106 101
- Indradru  
 AK 92 45
- Indrāṇikā  
 AK 98 69
- Indrasurasa  
 AK 98 69
- Indravāruṇī  
*Citrullus colocynthes* Shoad  
 AK 120 157
- Indrayava  
 AK 97 67  
 MP 118 23
- Īṅguda (Īṅgudi)  
*Terminalia catappa*  
 vi 61 4  
 MP 118 8
- Īṅgudi  
*Terminalia catappa* L  
 Pan IV 3 164  
 AK 92 46  
 UV 33  
 A I 13 ; II p 73 : IV 3  
 R XIV 81
- MP 274·32  
 Oil extracted from it fruits,  
 used by hermits for rub-  
 bing on their heads, for  
 lamps and as an oint-  
 ment.
- Irāpuṣpa  
 MP 118·38
- Isikā  
*Polytoca barbata*  
 AV vii 54·4  
 xii 2 54  
 SB 1 1 4·19 (mentions a  
 basket of Isikā) iv 3·4 16  
 etc.  
 JB Up i 9 ; ii 134  
 Ch Up v 24·3  
 Kaṭha Up ii 6 17 etc  
 Nirukta ix 8  
 Sāṅkh Āra ii 16 (fold and  
 pin of door made with it)
- Jalanīlī  
 UV 10
- Jambaki  
 UV 3
- Jambava  
 MP 217·58  
 Recommended for storing  
 in a fort.
- Jambila  
 (v. l. Jāmbīla)  
*Citrus aurantium*  
*C Medica* var *acida*  
 Mait Sam III. 15·3  
 Kāth Sam V. 12·1  
 Vāj Sam XXV. 3
- Jambīra  
 AK 85·24



AK 100·80	<i>Jasminum grandiflorum</i> L
UV 8	AK 99·73
MP 96·6, 118·23, 255·24	KS IV. 1·7
Jambū	UV 17
(Jambula— <i>Eugenia jambolana</i> Lamk.)	MP 118·14 ; 36 ; 255·24
Pan IV. 3·165	According to MP, a house having it is believed to be prosperous and beautiful.
KS VII. 2·31, 33	Jātiphala
AK 84 19	MP 118·9
Kad 53	Jayā
UV 8	AK 97·67
MP 96·7, 161·61	MP 217·65
Haunt of the cuckoo.	According to MP, recommended for storing in a fort.
Jaṅgida	Jayanti
<i>Terminalia arjuna</i>	AK 97·66
AV II. 9	Jiraka
XIX. 34 35 (Used as remedy against all sorts of diseases ) XIX. 39·10 (amulet)	KS IV. 1·6
Japā	MP 60·27
<i>Hibiscus rosa sinensis</i>	Jivaka
MC 32	AK 117·143
KS IV. 1·7	MP 217·43
AK 99·76	In MP recommended for storing in a fort.
VP 75·34	Jivanti
MP 60·39	AK 116 142
UV 17	UV 61
Its colour is compared with that assumed by clouds at dusk. According to VP, it should be avoided in <i>Śrāddha</i> .	Its bones serve as manure for yielding <i>Kārpāsa</i> cotton.
Jartila	Jivita
B III. 2·15	MP 217·74
Jaṭāmāṃsī	Recommended for storing in a fort.
AK 114·134	Jyotiṣmatī
Jāti	UV 24

**Kacchaka**

UV 13

**Kacvī**

UV 9

**Kadali***Musa sapientum*

Me 82, 101

K 1·36

R XII. 96

AK 109·113

Kad 63

UV 7

MP 96·6, 118·37, 180·36,  
255·24According to MP, a house  
having it becomes prosper-  
ous and beautiful.The deer feed on it when  
it buds. The thigh of a  
beautiful woman is com-  
pared with it.**Kadamba***Neuclea cadamba*

K III. 68

Me 25

V IV. 61

R XIII. 27 ; XV. 99

RS II. 17, 20, 23, 24 ; III. 13

AK 91·42

H 39

UV 9

MP 62·24, 95·24, 118·16,  
161·56, 64, 180·27, 217·80In MP it is recommended  
for storing in a fort.The flowers bloom at the  
advent of the rainy  
season.Used by women as decora-  
tion on their heads, espe-  
cially in the parting of  
their hairs.**Kairvāruka**

KS IV. 1·29

**Kākajihvā**

MP 217·51

Recommended for storing  
in a fort.**Kākambira**

RV VI. 48·17

**Kākodumbara (-barikā)**

UV 50

MP 217·70

In MP recommended for  
storing in a fort.**Kākola**

MP 217·43

Recommended for storing  
in a fort.**Kākoli**

MP 118·31

**Kakubha***Terminalia arjuna*

VI. 61·14

Me 22

RS II. 20

UV 53

**Kālāguru***Agallochum*R IV. 81 ; XIII. 55 ; XIV.  
12RS II. 21, IV. 5, V. 5, VI.  
13Elephants are tied to these  
trees which grow abun-  
dantly in Prāgjyotiṣa.

- Kalama  
*Oryza sativa*  
 R IV. 37  
 K V. 47
- Kālamalikā  
 MP 217·63  
 Recommended for storing  
 in a fort.
- Kalama-śāli  
 UV 33
- Kalambi  
 AK 121·158
- Kālāmra  
 VP 43·6
- Kālaśāka  
 MP 118·22, 217·50  
 Recommended for storing  
 in a fort.
- Kālayakadruma  
 MP 118·5
- Kalhāra  
 RS III. 15  
 UV 10
- Kaliṅga  
 MP 96·5, 118·12
- Kāliyaka  
 RS IV. 5, VI. 12  
 MP 161·62
- Kalpavṛkṣa (or -druma)  
 VP 45·40  
 MP 11·44, 92·5, 121·1  
 Honey is said to be extrac-  
 ted from it.
- Kāmā  
 MP 217·72
- Kamala (See Abja)  
*Nelumbium speciosum* Willd.  
 Me 41, 50, 71, 88
- R III. 36 ; IX. 16, 27 ; XI.  
 12 ; XIX. 1. 11.  
 V II. 12·2 ; IV. 40. 1 ; 54, 73  
 A VI. p. 135, VI. p. 215  
 K V. 21 ; VII. 89 ; VIII. 19,  
 85  
 Mal V. 6  
 RS I. 28, III. 5, 8, 11 ; V.  
 13 ; VI. 32 ; XVII. 40  
 UV. 10  
 Blooms at sunrise and closes  
 at sunset. Abode of  
 goddess Lakṣmī. A beau-  
 tiful woman's face, soft  
 body, beautiful palm or  
 eye are compared with it.  
 Lotuses, especially blue  
 ones, used by women as  
 ear-ornaments.
- Kamalini  
 UV 49
- Kampilla  
 UV 20
- Kanakabhadra  
 MP 83. 20
- Kāñcana  
*Bautinia acuminata* L  
 UV 40  
 One of the trees which  
 should not be planted in  
 the residential house.
- Kāṇḍaka  
 MP. 118. 31
- Kandalī ( Kandalā )  
 Me 21  
 V IV. 15  
 R XIII. 29  
 RS II. 5.

MP 118.31	Kapitthana
Kaṇḍurā	UV 13
MP 217. 66	Karakṣṣṇā
Recommended for storing	MP 217. 74
in a fort.	Recommended for storing
Kaṇkola (—Ka)	in a fort.
MP 96. 7, 118. 25, 217. 80	Karamarda (—Ka)
Recommended for storing	<i>Corissa carandus</i> L
in a fort.	UV 43
Kaṇkeli	MP. 96. 7, 118, 24, 217. 55
RS III. 18	Recommended for storing
Kaṇṭakāra (i) or Kaṇṭakiri,	in a fort.
Kaṇṭakārikā	Karañja
<i>Solanum xanthocarpus</i> Sd	<i>Pangamia glabra</i> Vent
Pan IV. 3. 152	Vi. 61. 14
AK 104. 94	Ap I. 17. 27
UV 22	UV. 21
MP 217. 44	Prohibited as food
In MP, recommended for	Karañjaka
storing in a fort.	AK 92. 48
Kaṇṭakī	Karañjiphala
UV 8	UV 220
Kāṇṭhāl	Stated to yield abundant
UV 13	fruits when sprinkled
Kapittha (Ka)	over with the blood and
<i>Feronia elephantum</i>	fat of boars, etc.
AV. iv. 4.8 (used for virility)	Kāraskara
AK 85. 21	Pan. VI. 1.156
KS II. 1. 29	Karaṭa
VP 75. 75-6	MP 118. 44
MP 96.5, 118.6, 217.5, 218.5	Karavalli
UV 33	UV 63
According to VP it is a	Karabilva
taboo in <i>Śrāddha</i> . Accord-	UV 8
ing to MP, recommen-	Karavi
ded for storing in a fort	AK 119. 112, 153
and it is an antidote	MP 217. 63
against poison.	According to MP,

- recommended for storing  
in a fort.
- Karavīra (—Ka)  
UV 48  
AK 99. 77  
MP 60. 38, 75. 3, 118. 19,  
21 etc.
- Karcūra  
AK 120. 155
- Karcūraka  
AK. 115. 135
- Karīra  
*Cappris aphylla* = *C. decidua*  
Tait. Sam ii. 4. 9. 2  
Kāth. Sam. xi. 11 ; xxxvi. 7  
SB. ii. 5. 2. 11  
UV 23  
Pan. IV. 3. 141  
MP. 96. 7, 217. 80  
Recommended for storing  
in a fort.
- Karkandhu  
*Zizyphus nummularia*  
*Z. quenoplia*  
*Z. jujuba*  
RV i. 112. 6  
Kāth. Sam. xii. 10  
Mait. Sam. iii. 11. 2  
Vāj. Sam. xix. 23. 91  
xxi. 32  
xxiv. 2  
SB. V. 5. 4, 10  
xii. 7. 2. 9 ; 9. 1. 5 etc.  
JB. ii. 152, 5 (had red berry)  
AK 89. 37  
Pan. V. 2.24  
UV 42  
MP 217.55
- In MP, recommended for  
storing in a fort.
- Karkaṭi  
AK 120. 156.  
UV 8  
MP. 187.33  
According to MP, it is aus-  
picious as a gift by  
ladies.
- Karkoṭakī  
MP. 118.28
- Kārṣmārya  
*Gmelina arborea*  
Tait. Sam. v. 2.7, 3.4 ; vi.  
2.1, 5  
Mait. Sam. iii. 2.6 ; 7.9  
SB iii. 4.1.6 ; 8.2.17 ; iv.  
3.3.6 ; vii. 4.1.37
- Karnikāra  
*Pterospermum acdri-folium*.  
V II. 22 ; III. 3.  
K III. 28, 5, 3, 62.  
RS VI. 5, 20, 27.  
UV 42  
AK 96.61  
MP 118.3, 180.25  
Rich in golden colour, but  
devoid of fragrance. Used  
by women to decorate  
their hair.
- Kārpāsī (-sa)  
*Gyossipum hertaceum* L.  
AK 110. 116.  
MP. 118.36, 217.77  
In MP. recommended for  
storing in a fort.
- Kārśya  
Pan VIII. 4. 5.

Kārūṣa (Karuṣa, Karūṣaka)	to the destruction of demons.
VP 8.152	
MP 217.55, 58	Kāśmīri
In MP, recommended for storing in a fort.	MP 118.8, 217.52
Kāśa	Recommended for storing in a fort.
<i>Saccharum spontaneum</i> L.	Kāsmāyaphala
RV X. 100.10	MP 96.6
Tait. Ara. vi. 9. 1	Katakaphala
Pan IV. 2. 80. VI. 2. 82.	UV 27
UV 25	Kaṭaphala
VP 75.41	AK 90.41
MP 61.50, 118.35. 154.300	MP 118.9, 17 ; 217.49, 76
etc.	In MP. recommended for storing in a fort.
K VII. 11.	Katambhara
RIV. 17.	AK 119. 153
RS III. 1. 2, 26.	Katṛṇa
AK 122.163	Pan VI. 3. 103.
Its flowers are very white.	Kaṭu (-ka)
According to VP., it is good for <i>Śrāddha</i> .	AK 102. 86.
Kāsamarda (-i)	MP 217.46
MP 118-24, 31	In MP., recommended for storing in a fort.
Kāsāri	Kaṭukaroḥiṇī
MP 217.79	UV 13
Recommended for storing in a fort.	Kavaka (Same as Chatrāka)
Kaseru (-kā)	MS V. 5.
<i>Scirpus grossus</i> Lf.	VS I. 7.171, 176.
KS VIII. 1.39, 43.	Kavijjaka
MP 217.52	KS VIII. 2. 37.
In MP. recommended for storing in a fort.	Kāyasthā
Kāśmāri (-ra)	MP 217.64
VP 75.2	Recommended for storing in a fort.
MP 96.6, 271.47	Kesara (See Bakula)
The use of a vessel, made of its wood, leads	K II. 55 ; IV. 8 ; VIII. 76.

Me 86.

A 1. p. 30 ; IV. p. 127.

R IX. 36, 40.

RS II. 20.

AK 96.64

UV 3

MP. 57.16, 118.12, 24 ;  
217.52

Women used girdles of the  
flowers of this tree.  
Blossoms when spat upon  
by women. In MP.,  
recommended for storing  
in a fort.

Kesari

AK 134. 170

Ketaka (Ketaki)

*Pandanus Odoratissimus*

K VIII. 58

Me 23

R IV. 55, VI. 17.

Mal. IV. p. 74

RS. II. 17, 20, 23, 26

H 450

UV 3

MP. 57, 16, 81.28, 118.12,  
255.24

Pollens of this flower are  
carried by the wind.  
According to MP ; a  
house having it attains  
prosperity and beauty.

Khadira

*Areca catechu* Willd

RV. iii. 53.19

AV. iii. 6.1 ; V. 5.5 ; viii.  
8.3 ; x. 6.6

Mait. Sam. iii. 9-3

Tait. Sam. iii. 5.7.1 (Sacrificial  
ladle made of it)

AB. ii. 1

SB. i. 3.3, 20 ; iii. 6.2, 12 ;  
iv. 9.2 (stated to be of  
great strength)

Sāṅkh. Āra. xii. 8

vi. 61.14

Pan. VIII. 4.5

AK 93. 50

AK 116. 142

KS. VII. 1. 31

UV. 7

VP. 74. 9

MP. 69.29, 93.27, 217.80

According to VP ; its sticks  
are used in *Śrāddha*. In  
MP recommended for  
storing in a fort.

Khalakula

*Dolichos biflorus*

Br. Up. vi. 3.22

Khalva

*Phaseolus radiatus*

*Cicer arictinum*

*Vigna catjang*

AV. ii. 1 ; v. 23.8

Vāj. Sam. xviii. 12 (Accor-  
ding to Mahādhara,  
Canaka or chicken pea)

Br. Up. vi. 3.32 (According  
to Sāyaṇa, Niṣpāva)

Kharjūra

*Phoenix sylvestris*

Tait. Sam. ii. 4.9.2

Kāth. Sam. xi. 10 xxxvi. 7

VP. 65.75-84

MP. 118.8, 161.62

- R IV. 57  
 AK 124.170  
 UV 8  
 Grows on seaside.  
 Kharjūrayaṣṭikā  
 MP. 217.46  
 Recommended for storing  
 in a fort.
- Kicaka  
*Bambusa arundinacea* Willd  
 Me 58  
 K I. 8  
 R II. 12, IV. 73  
 AK 122.162  
 MP. 118.35  
 Produces a charming sound  
 as the wind enters into it.
- Kimśuka (Same as Palāśa)  
 (Also called Parṇa)  
 V. 97.5 (Parṇa)  
 RV. (X. 85.20 (used in  
 wedding); bridal car  
 decorated with it)  
 AV. iii. 5.4.8 (amulets and  
 cover of sacrificial dish)  
 V 5.5  
 XVI. 11.4.53.  
 Tait. Sam. iii. 5.7.2 (Sacrificial  
 implements made  
 with its wood)  
 Mait. Sam. iv. 1.1  
 PB. xxi. 4.13  
 Kāth. Sam. xv. 2 ; viii. 2  
 Tait Br. i. 1.3.11 ; 7.1.9 ;  
 8.7 iii. 7.4, 2, 18 etc.  
 Kaus. Br. x. 2  
 SB. i. 3.3.19 ; i. 5.4.5 ;  
 ii. 6.2.8 ; v. 2.1.17 etc.
- AB. ii. 1  
 R IX. 31  
 RS. VI. 19, 20, 28  
 AK 87.29  
 UV 68  
 MP. 118.9, 217.78  
 Stated to be terrifying  
 (bhītida).
- Kiṇhi  
 MP. 217.63  
 Recommended for storing  
 in a fort.
- Kiñjalka  
 MP. 154.230
- Kiñkirāta  
 MP. 118.12
- Kirāta  
 MP. 118.12, 217.69  
 Recommended for storing  
 in a fort.
- Kiyambu  
 (V. L. Kyāmbu)  
 RV. x. 16.13 = A.V. xviii. 3.6  
 (Planted in the place  
 where dead bodies are  
 burnt)  
 Taitt. Āra. vi. 4.1, 2  
 (Kyāmbu)
- Kodrava  
 UV 33
- Kokanada  
 K XVII. 16  
 UV 10
- Kokilākṣa  
*Hygrophila spinosa* T.  
 KS. VII. 2.34
- Kolaka  
 MP. 217.56



Recommended for storing in a fort.	Kuberaka
Kośataka	MP. 118.40, 217.62
UV 92	Recommended for storing in a fort.
Kośi	Kuberākṣi
UV 11	<i>Caesalpinia banducella</i> Flem.
Kovidāra	AK 94.55
Vi. 61.4	Kubjaka
RS. III. 6	KS. IV. 1.7
AK. 85.22	MP. 60.38, 81.28 etc.
UV 20	Kula
MP. 118.7, 9	UV 25.
Kramuka	Kulattha (Kulatthaka)
AK 123.169	UV 28.
Kṛṣṇala	VP 8.151
<i>Abrus precatorius</i>	Kulikāṅgākṣi
Kāṭh. Sam. xi. 4	MP 217.51
Taitt. Br. i. 3.6, 7	Recommended for storing in a fort.
Seeds used as standard weights for currency.	Kulmāṣa
AK 91.42	<i>Phaseolus mungo</i>
Kṛtamālaka	Ch. Up. i. 10.27
MP. 217.68	Nirukta, i. 4
Recommended for storing in a fort.	Kumbhakari
Kṣīra	UV 43.
UV 7	Kumbhikā
Kṣīrakākoli	MP 217.78
KS. VII. 1.39	Recommended for storing in a fort.
Kṣīrakaśāka	Kumkuma
MP. 118.32	<i>Crocus sativus</i>
Kṣīrika (-druma)	UV 49.
UV 20	R IV. 67
MP. 118.22	RS V. 4, 9, 12
One of the trees by planting which one is supposed to ensure happiness for seven births.	Kad 219
	H 368
	MP 60.38, 81.28, 118.38, 154.230, 217.65.

- It grows on the bank of the Indus. In MP recommended for storing in a fort.
- Kumuda**  
*Nymphaea esculenta.*  
 AV IV. 34.5  
 Pan. IV. 2.10, 87  
 Me 42, 60.  
 V III. 16.  
 A V. 28.  
 K VII. 74 ; VIII. 70.  
 R IV. 19 ; VI. 86 ; XVI. 76, 81, 86 ; XVII. 6, 75 ; XVIII. 3, XIX. 34.  
 RS. III. 2, 15, 21, 23, 26.  
 Kad 155  
 UV 10  
 Extremely white objects are compared with it. Blooms at night.
- Kumudvatī (See Kumuda)**  
 A III. 14 ; IV. 2, IV. p. 122.  
 R VI. 36 ; XVI. 85 ; XVII. 1. 6.
- Kuñcīkā**  
 MP. 217.63  
 Recommended for storing in a fort.
- Kunda**  
*Jasminum multiflorum or pubescens.*  
 Me 49, 71, 118.  
 V II. 4.  
 AV 19.  
 Mal. III. 8.  
 RS IV. 2, VI. 23, 31.  
 K XVII. 27.  
 AK 99. 73
- UV 3**  
 MP 62.23, 118.11, 161.63  
 Used by women for decorating their hair.
- Kuraṇḍaka**  
 VP 75.34  
 Its flowers are tabooed in *Śrāddha*.
- Kuraṇṭaka**  
 UV 17.
- Kuraṇṭhaka**  
 AK 99.74
- Kurabaka**  
*Barleria cristata.*  
 Me. 71, 86.  
 V II. 7.  
 A VI. 4.  
 R IX. 29.  
 Mal III. p. 37, V. 4, 5, 9.  
 RS III. 10, VI. 18, 33.  
 AK 99.74  
 MP 118.19  
 Used by women to decorate the top-knot of their hair, Blooms in spring.
- Kuraṇṭa (-ka)**  
 KS IV. 1. 7.  
 MP. 62.23, 161.63
- Kuruvaka**  
 UV 27.
- Kuruvinda**  
 AK 121. 160.
- Kuśa**  
*Eragrostis cynosuroides*  
 SB. ii. 5.2. 15 ; iii. 1.2. 16 ; iii. 6.2. 9 v. 3.2. 7 etc.  
 Mait. Sam. iv. 5.7  
 Taitt. Br. 1.5. 10 ; 1.2. 7

- B I. 6. 3, I. 14. 11, II. 6. 31,  
 IV. 513.  
 Vas XXVII. 12.  
 IV 1. 42.  
 Pan. V. 3. 105.  
 V. 2. 63.  
 A III. p. 84.  
 R I. 95 ; V. 4, 7 ; VIII. 18 ;  
 XIII. 43 ; XIV. 28 ;  
 XIX. 2.  
 AK 123. 166  
 Kad 125  
 UV 25  
 MP 93.27, 118.36  
 Used at sacrificial rites.
- Kuśara**  
*Saccharum officinarum*  
 RV. i. 191.3
- Kuśeśaya** (See Abja)  
 A IV. p. 136.  
 R VI. 18.  
 MP 118.15
- Kūsmāṇḍa** (-Ka)  
*Benincasa cerifera* Savi  
 AK 120. 156  
 KS IV. 1. 29  
 UV 8  
 MP. 96. 5, 118. 27
- Kuṣṭha**  
*Costus speciosus* C. *arabicus*  
*Saussurea auriculata*.  
 AV. v 4 ; 1 V. 4. 10  
 (cures headache, optical  
 disease, bodily affection) ;  
 vi. 102. 3  
 vi 102 ; xix. 39, 1 ; 39. 9  
 (Cures fever and con-  
 sumption)
- AK 112. 126  
 KS VII. 1. 4, VII. 2. 4  
 UV 163  
 MP 217. 63, 218. 9  
 One of the plants whose  
 leaves have to be crushed,  
 mixed with water and  
 sprinkled over a flower  
 plant to ensure fragrance.
- Kusumāṃśuka**  
 MP 118. 9
- Kusumbha**  
*Carthamus tinctorius* L.  
 RS I. 24, VI. 4  
 H 285  
 Kad 218  
 UV 33  
 MP 60.9, 39 etc.  
*Wrightia* is *anti dysente-rica*.  
*Holarrhena* *antidysen-*  
*terica*.  
 Pan. V. 1. 50  
 Me 4  
 R XIX. 37  
 RS III. 13  
 AK 97. 67  
 UV. 33  
 KS VII. 2. 19, 37  
 MP 96. 7, 118. 16, 161. 63
- Kuṭannāṭa**  
 AK 114. 132
- Kūṭaphala**  
 MP. 96. 10
- Kuvala**  
 Pan V. 2. 24
- Kuvalaya** (Kubalaya)  
 Me 46, 100  
 Mal IV. 10

- RS II. 22  
 UV 10  
 Used by women as ear-decoration. A beautiful woman's eyes are likened to it.
- Kyāku  
 G XVII. 30  
 Vas XIV. 33
- Lākṣā  
 Kad 92
- Lakṣmaṇā  
 A plant having leaves with red spots.  
 AV ii. 25. 3 (Used against abortion)  
 MP. 266. 14
- Lakta  
 MP 161. 63
- Lakuca  
 UV 10  
 MP 118.15, 161.61, 217.55  
 Stated to belong to the *amla* group, and recommended for storing in a fort.
- Lasuna  
 G XVII. 30  
 Vas XIV. 33  
 KS IV. 1. 29  
 MS. V. 5  
 YS I. 7. 176  
 AK 118. 149  
 UV 12  
 MP 217. 64  
 In MP recommended for storing in a fort.
- Lāva  
 VP 75. 51
- MP 118. 53  
*Lava* grass is tabooed in *Śrāddha*.
- Lavali  
*Cicea acida*  
 V. V. 8
- Lavaṅga  
*Eugenia caryophyllaca* Wight  
 K VIII. 25  
 R VI. 57  
 MP 118. 25  
 Southern breeze, carrying their filaments, is enjoyed by people.
- Loca  
 MP 118.15
- Lodhra  
*Symplocos racemosa*  
 MC. 71  
 K VII. 9. 17  
 R II—29 ; III. 2  
 RS IV. I, VI. 33  
 AK 88. 33  
 MP 118. 22, 161. 61  
 Its pollens are used by women as a cosmetic, especially as face-powder.
- Lodhrapuṣpiṇī  
 MP 217. 63
- Lohapṛṣṭha  
 MP 118. 52
- Lomaka  
 MP 217. 77  
 Recommended for storing in a fort.
- Madārati  
 Intoxicating plant (creeper)  
 AV, vi. 16. 2

Madayantikā

UV 25

KS. VII. 2. 37

Mādhavi

*Gaerthera racemosa*

Me. 86

V II. 4

A III. p. 93 ; VI. p. p. 199,  
200

AK 98. 72

UV 48

Pleasure-bowers are made  
of *Mādhavi* creepers.

Madhūcchiṣṭa

MP. 217. 78

Recommended for storing  
in a fort.

Madhuga (Madhugha)

Honey plant, sweet herb.

RV. vi. 70. 1. 5 (Madhu-  
dugha)

AV. i. 34. 4 ; vi. 122. 3

Madhūka

*Madhuka latifolia*

AV. i. 34. 5

A love-spell recited with this  
plant. An intoxicating  
drink is made from its  
flowers.

K VII. 14

R VI. 25

MP 161. 65, 187. 32 217.  
49, 218. 15, 257. 8

AK. 86. 27, 108. 110

UV. 21

In MP. recommended for  
storing in a fort. Also  
recommended for building

purposes and use in ritual.

Garlands of these flowers  
were used by women  
for decorating their hair.

Madhūlikā

MP. 217. 48

Recommended for storing  
in a fort.

Madhupargu

MP. 217. 45

Recommended for storing  
in a fort.

Madhuvallikā

MP. 217. 50

Recommended for storing  
in a fort.

Madhuyaṣṭi (Kā)

See Yaṣṭimadhu

Maduka

KS. VII. 1. 39

Māgadhi

AK 105. 97

Mahākṣīrā (V. I. Mahādrākṣā,  
Mahākṣudra)

MP. 217. 45

Recommended for storing  
in a fort.

Mahānimba

MP. 118. 5

Mahātapas

MP. 217. 45

Recommended for storing  
in a fort.

Mahādantaśatha

MP. 218. 5

An antidote against poison.

Mākanda

AK 88. 34

Makūlaka

AK 117. 144

Malapū

AK. 96. 22

Mālatī

*Aganosma caryophyllata* G

Vi. 61. 15

MP. 60.39, 62.24, 70.4,  
95.24, 217.56, 74

Me. 103

RS. II. 24, III. 2, 19

AK. 99. 73

Fragrant *Mālatī* flowers  
open towards the even-  
ing. According to MP.,  
it is used in rituals.  
Recommended for storing  
in a fort.

Malaya-druma (See Candana)

R XI. 32.

Mallikā

*Jasminum Zambac.*

R XVI. 47, 50.

AK 98. 70.

MP 60.38, 62.24, 161.61,  
255.24

UV 8.

KS IV. 1. 7.

Blooms in the evening.  
According to MP, the  
house having it becomes  
prosperous and beautiful.  
It is recommended for use  
in rituals.

Mālūra

AK 88. 32.

Māmsī

MP 217.71

Recommended for storing  
in a fort.

Mandāra

*Erythrina indica* Lamk.

MP 60.34, 62.24 etc. 118.9,  
154.381, 161.62

UV 219.

The hole of this tree being  
smeared with earth,  
cowdung and ghee, the  
creeper of pumpkin-  
gourd yields good fruit.  
In MP. recommended for  
use in rituals.

Mañjiṣṭhā

*Rubia tinctorium* L.

AB iii. 2. 4

Sāṅkh. Br. vii. 7

AK 103. 91

H 313

Kad 81.

MP 217.72, 218.6

UV 199

One of the substances which,  
if applied to a *Kārpāsa*  
tree, results in luxuriant  
yield. In MP. recommen-  
ded for storing in a fort.  
It is stated as an antidote  
against poison.

Marica

Vas I. 20. 12.

KS VII. 1. 24.

R IV. 46

MP 118.26

Trade in it is prohibited pre-  
sumably for Brāhma-  
ṇas.

<b>Marika</b>	<b>Mātuluṅga (ka) Also Mātuliṅga.</b>
MP. 118.26, 217.62	MP 96.6
Recommended for storing	AK 100. 79.
in a fort.	UV 68.
<b>Maruvaka</b>	One of the trees which are
AK 94. 53.	terrifying ( <i>bhītida</i> ). In
AK 100. 79.	MP. recommended for
UV 25.	use in rituals.
<b>Māṣa</b>	<b>Meda</b>
Ap. 2. 16. 22.	MP 217.44
vi. 80. 1.	Recommended for storing
Vp. 8. 151.	in a fort.
Fit for use in <i>Śrāddha</i> .	<b>Methikā</b>
<b>Māṣaparnī</b>	UV 153.
<i>Teramnus labialis</i>	The water, in which it is
AV ii. 25.3	soaked along with some
MP 217.44	other substances, is stated
AK 116. 139.	to make trees like
In MP. recommended for	<i>Kadamba</i> produce frag-
storing in a fort.	rant flowers in abun-
<b>Māṣaparna</b>	dance.
UV 54.	<b>Moca (Ka, Mocākhyā)</b>
<b>Māṣiṇa</b>	vi 61.5
H 375.	MP 217.76
<b>Maskara</b>	AK 87.31
Pan VI. 1. 154.	Recommended for storing
<b>Masūra</b>	in a fort.
<i>Lens esculenta</i>	<b>Mokṣaka</b>
Vāj Saṃ. XVIII. 12	UV 26
Br. Up. vi. 322	<b>Moraṭa</b>
VI. 79. 18.	KS VII. 1.38
Vp. 8. 151.	<b>Mṛdvika (Kā)</b>
<b>Masūsyā</b>	MP 118.26, 217.46
A grain of the northern	UV 11
region.	In MP. recommended for
Taitt. Br. iii. 8.14. 6	storing in a fort.
<b>Mātāmra</b>	<b>Mṛdvi</b>
MP 118.6	UV 40

- One of the trees growing in marshy lands.
- Mṛṇāla**  
 Lotus-stalk  
 V III. 13  
 A III. p. 84 ; VI. 18  
 K I. 40 ; III. 49 ; V. 29 ; VI. 68  
 R XVI. 7, 16  
 RS I. 19  
 A woman's soft body is compared with it. Lotus fibres were worn as garlands by women between their breasts.
- Mṛtasañjivani**  
 MP 122.56
- Mucukunda**  
 MP 118.11
- Mudga**  
*Phaseolus mungo* L.  
 Vi 80.1  
 Vp 8.151  
 MP 96.11  
 UV 28  
 In MP. recommended in rituals.
- Mudgaparṇi**  
 MP 217.43  
 AK 109.114  
 Recommended for storing in a fort.
- Mukta**  
 UV 33
- Mukunda**  
 vi 79.17
- Mūla(ka)**  
*Raphanus sativus* L.
- MP 96.7, 217.63, 77  
 AK 121.158  
 KS IV. 1.29  
 In MP recommended for storing in a fort.
- Muñja (ka)**  
 Pan. III. 1.117  
 Ap I. 2.33, 35  
 I. 21.1  
 B I. 3.14  
 V XI. 58  
 MP 118.4  
 Trade in it is allowed. Girdles, made of it, are prescribed for Brāhmaṇa Brahmacārins.  
 A (I. 2. 35) prescribes a girdle of *Muñja* for a Kṣatriya as an alternative to the bow-string.
- Murā**  
 AK III. 123  
 UV 57
- Mūrvā**  
 MP 218.4  
 AK 101.84  
 UV 24  
 In MP it is mentioned as an antidote against poison.
- Muṣākarṇi**  
 UV 10
- Mūṣikaparṇi**  
 AK 102.88
- Mustā**  
*Cyperus rotundus*.  
 A II. P. 65  
 R IX. 59 ; XV. 19



RS I.17	Recommended for storing
MP 217.68	in a fort.
AK 121.160	Nāgavalli
UV 27	MP 118.25
Boars feed on it. Grows	Naiyagrodha
in pools. In MP recom-	MP 69.29
mended for storing in a	Recommended for ritual
fort.	purposes.
<b>Nāḍa</b>	Nakha
<i>Phragmitis maxima</i>	AK 113.131
RV i. 32.8 ; 179.9 ; ii.	Naktamāla
34.3 ; viii. 69.2 ; x. 11.2 ;	. <i>Pongamia glabra</i> .
105.9	R.V. 42
<i>Nirukta</i> , V. 2	MP 217.68
From RV i. 32.8 it seems	AK 92.48
to have been a reed with	UV 10
splits of which boats	Grows abundantly on the
were made.	banks of the river Nar-
From RV ii. 34.3 it appears	madā. In MP. recomm-
to denote reed with	ended for storing in a fort.
which whips were made.	Nala
Pan IV. 2.87	B I. 14. 11.
AK 122.163	Nalada (Naladī)
Nāgabālā	<i>Nardostachys jatamansi</i>
AK 110.117	AV VI. 102. 3
Nāgakesara	Ait. Āra. iii. 24
<i>Mesua ferra</i> L.	Sāṅkh. Āra. XI. 4
MP 118.24	MP 217.68
AK 97.65	Recommended for storing
KS VII. 1.8, 32	in a fort. Appears to have
Nāgakusuma	been used for garlands.
UV 33	Nali
Nāgara	AK 113. 130.
MP 217.62	Nalikā
Recommended for storing	UV 25.
in a fort.	Nālikera (Also Nārikela)
Nāgaraka	<i>Cocos nucifera</i> .
MP 217.57	A IV. p. 127.

- R IV. 42.  
 MP 96.8, 118.8, 161.62,  
 255.24  
 AK 123. 169  
 UV 3  
 Its water is relished as a  
 drink. According to MP.,  
 a house having it becomes  
 prosperous and beautiful.  
 Its use is recommended  
 for ritual purposes.
- Nalina  
 MP 161.52
- Nalini  
 Lotus.  
 RS III. 10.  
 K IV. 6.  
 A III. p. p. 84, 89, 100, 106,  
 108, 141.  
 V p. 173.  
 Me 41.  
 Its leaves are used as fans.
- Nameru  
*Elaeocarpus ganitrus*.  
 K I. 55 ; III. 43.  
 R IV. 74.  
 Its flowers are used as  
 decoration, especially of  
 the head. This tree  
 affords pleasant shade.
- Nandikāvarta  
 UV 33.
- Nandyāvarta  
 KS IV. 1. 7.
- Narāci  
 A poisonous plant.  
 AV. V. 31.4
- Navamālikā (Navamallikā)
- Jasminus sambac*.  
 A I, p. p. 26, 31, 33 ; II. p.  
 70 ; IV. p. 121, verse 12 ;  
 V. p. 173.  
 R IX. 42.  
 RS III. 18, VI. 5.  
 K XVII. 28.  
 KS IV. 1. 7.  
 MP 118.26  
 AK 99.73  
 UV. 27  
 A delicate woman is com-  
 pared with its flower.  
 The creeper entwines the  
 mango-tree. Pleasure-  
 bowers made with *Nava-*  
*mālikā* creepers.
- Nicula  
 Me 14.  
 V IV. 13.  
 MP 180.31  
 AK 96. 61.
- Nigrodha  
 UV 13.
- Nikoṭaka  
 MP 118.12
- Nili  
 AK 104. 95.  
 H 57.  
 UV 31  
 One of the trees by planting  
 which in the house a  
 house-holder brings ruin  
 to himself and his  
 family.
- Nilākalaśālā (Nilāgalaśālā)  
 Grain creeper.  
 AV vi. 16.4

## Nilotpala

Blue lotus

*Nymphaea stellata* Willd.

K I. 46.

RS II. 2, III. 17, 19, 26; IV 9.

UV 88

A beautiful woman's eyes  
are compared with it.

## Nimba

*Melia azadirachta* L.

vi 61. 14

MP 118.5, 161.66, 257.7

AK 86. 26

AK 96. 63

UV 3

In MP its use is prohibited  
for building purposes.

## Nipa (See Kadamba)

Pan IV. 3. 152

R XIX. 37

Me 21. 71

V IV. 42. 2

RS. II. 17, III. 13

KS. VII. 2. 33

MP. 118.17, 161.56, 60,  
217.53, 257.7

AK 91. 42

UV 25

In MP it is recommended  
for storing in a fort.

## Nirgunḍi

*Vitex negundo* L.

vi 61. 3

MP. 118.5

UV 19

UV 99

## Nisā

UV 198

## Niṣpāva (Also see Khalva)

VP 8. 151

MP. 62.28, 96.11

In MP. recommended for  
ritual purposes.

## Nivāra

A variety of paddy; wild rice.

Kāth. Sam. xii. 4

Mait. Sam. ii. 4. 10

Vāj. Sam. xviii. 12

SR V. 1. 4. 14. 3. 3. 5

T. R. i. 3. 6. 7. etc.

A I. 13 ; IV. p. 128, verse  
20

RV 9, 15 ; XVI. 28

MP 118.45, 266.16 etc.

Used by hermits on auspi-  
cious occasions.

In MP it is recommended  
for ritual purposes.

## Nyagrodha

*Ficus bengalensis*

RV i-24. 7

AV iv. 37.4, v. 5.5

A. B. vii. 30, 31

SB v. 3. 5.13 ; viii. 2. 7. 3

Ch. Up. vi. 12.1

Taitt. Sam. vii. 4. 12. 1

Vāj. Sam. xxiii. 13

A. B. 7. 35. 5

S. B. 13. 2. 7. 3

Pan VII. 3.5

AP I. 2. 38

V XI. 53

AK. 88.32

UV. 6

VP 35.40-2, 69.150, 72.8-9,  
45.3-5

MP 118.3, 217.78

The staff of a Kṣatriya  
Brahmacārin is made of  
the wood of this tree.  
According to VP., it  
symbolises prosperity. In  
MP it is recommended  
for storing in a fort.  
Remarkable for sending  
down roots from its  
branches

Nyastikā

*Andropogon aciculatus*  
AV vi. 139.1

Oṣadhi

A. B. 8. 37. 4  
B II. 8. 4, III. 2. 9, 11, 12  
UV 11

Padma

Lotus.  
Vas XXVII. 12  
Vp 41. 14-6  
Me 70  
K I. 16, 43; V. 19, 27;  
VII. 16, 38; VIII. 23, 30  
R III. 17 VI. 26, 36; 86;  
IX 80; X. 8, 62; XIII.  
51; XVI. 16, 46, 68;  
XVII. 75  
RS. II. 14, III. 1, 15; IV.  
1, 14; VI. 2  
K XI. 25, 46  
KS VII. 1. 8; VII. 2. 35  
H 18  
Kad 150  
UV 10  
Padmacāriṇī  
AK 117. 146

Padmaka

MP 118.6, 217.79, 257.11

Recommended for storing  
in a fort. It is auspicious  
for building purposes  
when used alone.

Padmini

Lotus.  
Me 84  
V I. 5  
K III. 76  
Mad II. 12

Pākādūrvā

Edible millet.  
RV X. 16.3 (Said to grow  
on spots where dead  
bodies are burnt)  
Taitt. Āra. vi. 4. 1. 2  
AV xviii. 3.6 (Reads  
*Sāṇḍadūvā*, having egg-  
shaped roots.

Palāṇḍu

Onion.  
Ap I. 17. 26  
V XIV. 33  
MS V. 5  
KS IV. 1. 29  
AK 118. 148  
YS I. 7. 176  
UV 12

Pālāṅki

AK 111. 122  
KS IV. 1. 29

Palāśa (Same as Kiṃśuka)

*Butea frondosa*.  
S. B. 1. 1. 1. 4, 13. 8. 4. 1  
Pan IV. 3. 141  
K III. 29

- AP I. 2. 38  
 G 1. 24, IX. 46  
 Vas XI. 52, XXVII. 12  
 vi 61. 15  
 AK 87.29, 120.155  
 UV 3  
 VP 37.18-9, 62.191, 75.1  
 MP 93.27, 143, 265.31 etc.  
 The staff of a Brāhmaṇa  
 Brahmacārin is made  
 with the wood of this  
 tree. According to VP  
 it symbolises the lustre  
 of a Brāhmaṇa. In MP  
 it is recommended for  
 ritual purposes.
- Pālivata**  
 UV 13
- Pāli**  
 MP 118.8
- Panasa**  
*Artocarpus integrifolia* L.  
 AK 96.61  
 VP 43.4  
 MP 96.5, 118.7, 161.60,  
 180.38, 255.24, 257.11  
 UV 7  
 In MP it is recommended  
 for ritual purposes. The  
 house having it is suppo-  
 sed to be prosperous and  
 beautiful. Auspicious for  
 building purposes when  
 used alone.
- Pāṇḍuka**  
 UV 33
- Pañkaja** (See Abja)  
 Lotus.
- K V. 9, XIII. 39  
 A V. 28 ; VII. 16  
 R III. 8 ; VII. 64 ; VIII. 55 ;  
 XIII. 54 ; XV. 52 ; XVIII  
 20 ; XIX. 8  
 RS III. 10, 23 ; V. 5  
 UV 33
- Parārika**  
 AP I. 17.26  
 Prohibited as food.
- Pārābata**  
 MP 217.57  
 UV 70  
 Stated to be conducive to  
 welfare if planted to the  
 south of the house. In  
 MP recommended for  
 keeping in a fort.
- Pāribhadra** (Ka)  
 Vi 61.5  
 MP 118.16, 277.8  
 AK 86. 26  
 AK 94.53  
 In MP recommended for  
 ritual purposes.
- Pārijāta** (Ka)  
 UV 7  
 VP 39. 11 ff.  
 MP 92.5, 118.25, 161.61  
 In MP it is recommended  
 for ritual purposes.
- Paripelava**  
 MP 217.71  
 Recommended for storing  
 in a fort.
- Parkaṭi**  
 AK 88.32
- Parṇa** (Same as Kimpśuka)

- Parṇāśa  
MP 118.10
- Parpata  
MP 217.71
- Parūṣaka  
UV 22  
VP 38.63 ff.  
MP 118.11
- Parvata (?)  
MP 217.51  
Recommended for storing  
in a fort.
- Pāṣāṇabheda  
Kad 369
- Pātā (Pāthā)  
*Stephania elegans*. *S. glabra*  
*S. hernandifolia*.  
AV ii. 27.4  
Kaus Sūtra, xxxvii. 1,  
xxxviii. 18
- Pāṭala  
*Bignonia suaveolens stereos-*  
*permum suaveolens*.  
A I 3  
R XVI. 52 ; XIX. 46  
RS I. 28  
Vp 78.9  
Stated to be fragrant.
- Pāṭalā  
MP 95.24, 118.19, 154.309,  
161.57, 218.2, 255.24  
AK 84.20  
In MP it is stated to be an  
antidote against poison.  
A house having it is  
supposed to be prosperous  
and beautiful. Recom-  
mended for ritual purposes.
- Pāṭatapatra  
MP 217.77  
Recommended for storing  
in a fort.
- Paṭola  
*Trichosanthes dioica* Roxb.  
AK 120.155  
Vp 78.9  
UV 217  
Its seed, if sown after being  
mixed with animal fat,  
and sprinkled over with  
water after being sown,  
yields fruit without stones  
within. Mentioned in VP  
in connexion with *Śrāddha*.
- Paṭolaka  
MP 96.11  
Recommended for ritual  
purposes.  
Paṭolakaṭukā  
MP 217.69  
Recommended for storing  
in a fort.
- Paṭolikāra  
MP 118.28
- Pāṭali  
Pan IV. 3.136  
AK 94.55  
UV 3
- Paṭaṅgi  
MP 217.71  
Recommended for storing  
in a fort.
- Pāṭhā  
AK 102. 85
- Pāṭhi  
AK 100. 80

Paṇḍarya  
 AK 113. 128  
 Phalini  
 R VIII. 61  
 Phanijjhaka  
 MP. 217.64  
 Recommended for storing  
 in a fort.  
 Phaṇita  
 MP 217.47  
 Recommended for storing  
 in a fort.  
 Picula  
 AK 90. 40  
 Picumanda  
 MP. 187.31  
 AK 96. 63  
 UV 3  
 In MP recommended in  
 rituals.  
 Pilā  
 A fragrant plant.  
 AV IV. 37.3  
 Pīlu  
*Careya arborea. Salvadoria  
 persica. S. Olleoides.*  
 AV XX. 135.12 (Doves  
 feed on its fruits).  
 G I 25  
 VI 61. 4  
 Pan V. 2. 24  
 VI 3. 121  
 MP 118.22, 217.79  
 AK 86. 28  
 UV 22  
 In MP recommended for  
 storing in a fort.  
 Piṇḍa Kharjūra (See Kharjūra)

A II. p. 71  
 Piṇḍāra  
 MP 96.9  
 Mentioned as a gift in  
 rituals.  
 Piṇḍūra (Piṇḍira)  
 UV 22  
 Pippala  
*Ficus religiosa* L.  
 MP 93.27, 217.49, 255.20  
 AK 84.20  
 UV 36  
 In MP recommended for  
 storing in a fort and use  
 in rituals. Believed to  
 be auspicious if it grows  
 to the west of the  
 house.  
 Pippali (-mūla)  
*Piper peepuloides. P.  
 longium.*  
 AV VI. 107.4  
 AP I. 20. 12  
 VI 61. 6, 79. 17  
 KS VII. 1. 24. 45  
 MP 118.25, 217.62 255.23  
 UV 8  
 AK 105.97  
 Trade in it is prohibited.  
 In MP recommended for  
 storing in a fort.  
 Piṭāla  
 KS VII. 1. 38.  
 Piṭanaka  
 AK 86. 27  
 pitudāru  
*Pinus longifolia*  
 Kāth. Sam. XXV. 6

- SB. iii. 5. 2. 15 ; 4. 4. 5. 17  
P. Br. XXIV. 5  
Mahidhara on Vāj. Sam. V.  
14. Sāyaṇa on AB. i. 28  
Pīṭhāla (—sāra)  
UV 199
- Piyāla**  
*Buchanania latifolia*  
K III. 31  
UV 20  
One of the trees which, if  
grown in a house, becomes  
conducive to welfare.
- Piyūkṣā**  
Pan VIII. 4. 5
- Plakṣa**  
*Ficus lacor*  
AB 7. 35. 6  
Pan IV. 3. 164  
VIII. 4. 5  
R VIII. 93 ; XIII. 71 ;  
XVOO. 12  
MP 8. 8, 217. 79, 255. 21  
VP 75. 1  
AK 88. 32, 91. 44  
UV 3  
Its bark is used in religious  
rites. According to VP  
it symbolises the lordship  
of the world. In MP  
recommended for stor-  
ing in a fort. Believed  
to be auspicious if it  
grows to the north of the  
house. It appears to have  
been a wave-leaved fig  
tree with small white  
fruit.
- Poṭagala**  
AK 122. 163
- Prācīnārūka**  
MP 217·57  
In MP recommended for  
keeping in a fort.
- Prakṣa**  
*Ficus lacor*  
Sāmaveda i. 144 ; ii.  
465  
AV V. 5 VI. 3. 10·1  
Taitt. Sam. vii. 4. 12  
Mait. Sam. iii. 10.2 ; vi.  
3. 10·2  
AB vii. 32 ; viii. 16  
Taitt. Rr. iii. 8. 19. 2  
SB iii. 8. 3. 10, 12 etc.  
Ait. Āra. V. 2. 2  
Is it the same as Plakṣa ?  
R and L sometimes used  
promiscuously.
- Pramaṇḍa**  
RV iii. 53. 14
- Pramaṇḍanī**  
A sweet-scented plant.  
Kaus. Sūtra, viii. 17, xxv.  
11, xxxii. 22
- Praprotha**  
A substitute of *Soma*.  
P. Br. viii. 4.1
- Prapunnāḍa**  
AK 118. 147
- Prasthapuṣpa**  
MP 161. 56
- Pratibimba**  
MP 118·20
- Priyaka**  
MP 217·80



Recommended for storing  
in a fort.

**Priyakāñcana**

MP 274.32

Used for constructing pillars  
in the *Tulāpuruṣa-mahā-*  
*dāna*.

**Priyāla (Ka)**

MP 118.8, 40 ; 217.79

AK 89. 35

In MP recommended for  
storing in a fort.

**Priyaṅgu**

(1) *Setaria italica*

Taitt. Sam. ii. 2. 11-4

Kāṭh. Sam. x. 11

Mait. Sam. ii. 1.8

Vaj. Sam. xviii. 12

G XVII. 3

VI 80. 1

Mal III. p. 45

RS IV. 10, VI. 12

AK 94. 56

UV 7

KS VII. 1. 32

MP 161.57, 180.24, 39 ;  
217.76, 218.6, 267.16

VP 8. 151

Puts forth blossoms at the  
touch of women. In MP  
it is recommended for  
storing in a fort and use  
in rituals. Stated as an  
antidote against poison.

*Aglaja odorata*

Ṣaḍ. Rv. V. 2

**Pr̥ṣni-parṇī (Aṛṣṇī)**

*Uraria logopoides*. *Lemna*

*Sp. Hemionitis cordifolia*  
AV ii. 25.1 (Protection  
against wild creatures).

SB xiii. 8. 1. 16

S. B. 13. 8. 16

MP 217.43

AK 104. 93

Recommended for storing  
in a fort. Roth (cited by  
Whitney) identifies it with  
a plant, called *Lakṣmaṇa*,  
curing barrenness.

**Pūga**

*Areca catechu*.

R IV. 44 VI 64 ; XIII. 17

MP 118.9, 255.24

AK 123. 169

Kad 56

KS III 3.16, III. 5.29

UV 8

Grows on seaside. A house  
having it is believed to  
be prosperous and beauti-  
ful.

**Punarnavā**

MP 217.51

Ak 118. 149

In MP recommended for  
storing in a fort.

**Puṇḍarika**

Lotus. *Nelumbo nucifera*.

RV X. 142.8

AV iv. 35.5

Taitt. Sam. i. 8. 2. 1

SB V. 5. 5. 6

Bṛ. Up. ii. 3.10, vi. 3.14

Ch. Up. i. 6.7

Ait. Āra. iii. 34

- K VIII. 58  
 V IV. 42  
 R IV. 17 ; X. 9 ; XVIII. 8  
 Mal. IV. 7  
 UV 10
- Punnāga**  
*Calophyllum inophyllum.*  
 VP 161.56, 180.25, 43 ;  
 255.22  
 AK 86. 25  
 UV 7  
 Beleived to be auspicious if  
 it be near a house.
- Puškara**  
 Blue lotus. *Nymphaea*  
*Stallata.*  
 RV vi. 16.13, vii. 33.11, X.  
 184.2  
 AV xi. 3.8, xii. 1.24 (Men-  
 tions sweet fragrance of  
 flowers).  
 Taitt. Sam. V. 4.1 ; 2.6, 5 ;  
 6. 9.2  
 Vāj. Sam. xi, 29  
 T. B. 1. 2. 1. 4  
 SB iv. 5.1, 16  
 Mait. Sam. iii. 1.5  
 Br. Up. iv. 3.11  
 K III. 65  
 R XVIII. 30, 37  
 Pan V. 2. 135
- Puṣpaḥṣa**  
 MP 217.48  
 Recommended for storing  
 in a fort.
- Pūtika**  
*Caesalpina fonducella.*  
*Rasella rubra.*
- Kāth. Sam. xxxiv. 3  
 SB. xiv. 1. 2. 12  
 P Ar. viii. 4.1, IX. 5.3  
 AK 92. 48
- Putrajīvoka**  
 MP 118.24
- Putirajjis**  
 AV viii. 8.2
- Putrakandā (Putrajani, Putada)**  
*Uraria logopo diodes*  
 AV ii. 25, 3 ( Remedy  
 against abortion and  
 other maladies ).
- Putudru**  
*Pinus Sp.*  
 AV. viii. 2. 28  
 Taitt. Sam. vi. 2. 8. 4  
 Mait. Sam. iii. 8. 5  
 Kans. Sūtra viii. 15 ; lviii.  
 15
- Rājādāna**  
 AK 92. 46  
 MP 217. 80  
 In MP recommended for  
 storing in a fort.
- Rājadanta**  
 MP 67. 7
- Rājajambu (-Ka, See Jambu)**  
 V. IV. 27  
 MP 118. 30
- Rāja Kośātaki**  
 UV 27
- Rājamāṣa**  
 Vi 79. 18
- Rajani**  
 UV 68  
 One of the trees stated to  
 cause fear (*bhītida*).

- Rājasarṣapa  
MP 217. 50  
Recommended for storing  
in a fort.
- Rājaśirṣakī  
MP 217. 49  
Recommended for storing  
in a fort.
- Raktālukandaka  
MP 96. 10
- Rājatālī  
R IV. 56
- Rājīva  
K III. 45
- Rajjudāla  
S. B. 13. 4. 4. 5
- Rakasandhyaka  
UV 10
- Raktotpala  
*Nymphaea rutra Roxb.*  
UV 10
- Rambhā  
*Musa sapientum L.*  
Mal III. 10  
MP 217. 43  
In MP recommended for  
storing in a fort.  
A beautiful woman's thighs  
are likened to this plant  
or rather its interior.
- Rasañjana  
MP 217. 71  
Recommended for storing  
in a fort.
- Rāsnā  
*Vanda roxburghii*  
AK 109. 115, 116. 140
- Rajjudāla  
*Cordia obliqua*  
S. B. xiii. 4. 4. 16
- Rasona  
UV 49  
AK 118. 149
- Reṇukā  
AK 111. 121
- Riṣṭaka  
MP 118. 6
- Rocanī  
AK 118. 147
- Rohiṣa  
MP 217. 65  
Recommended for storing  
in a fort.
- Rohitaka  
*Aphanamixis polystachia*  
Mait. Sam. iii. 9.3  
Pan iv. 3. 152  
AK 93. 49  
UV 132  
There must be water 94½  
cubits below and 3 cubits  
away from the ground  
where a *Badari* tree is  
found adjacent to a  
*Rohita* tree.
- Rṣabha  
MP 217. 43  
Recommended for storing  
in a fort.
- Rṣyaprokta  
MP 217. 50  
Recommended for storing  
in a fort.
- Rṣyagandhikā  
AK 108. 111

- Rudantī  
MP 217. 65  
Recommended for storing  
in a fort.
- Rudrākṣa  
*Elaeocarpus ganitrus* Roxb.  
MP 118. 24
- Ruruṭa  
MP 118. 29
- Sada  
Pan IV. 2. 88
- Śāda  
Grass  
RV ix. 15.6  
Vaj. Sam. XXV. 1
- Sadāmpuṣpa  
Ever flowering plant.  
AV iv. 20.9  
Used for driving away  
Piśācas (gobline).
- Sadgrantha  
MP 217. 71
- Saovala  
R II. 51  
V p. 95
- Sahā  
AV xi. 6.15  
Sāmavidhāna Br. ii. 6.10  
AK 99. 74
- Sahadeva  
RV i. 100. 17  
Sāma. Ar. ii. 6.10  
MP 217. 46  
Recommended for storing  
in a fort.
- Sahadevī (See under Arundhotī)  
*Vernonia cineria* Less.  
AV VI. 59.2
- MP 217. 48. 266. 14  
Recommended for storing  
in a fort.
- Sahakāra (See Āmra)  
V II. 6  
A I. p. 31 ; III. p. 95  
K IV. 38 ; VIII. 78  
R VI. 69 ; VIII. 61 ; IX. 33 ;  
XVI. 52 ; XIX. 46  
Mal IV. 13 ; V. 4  
RS II. 22, 27, 34  
KS VII. 1. 30. 32  
MP 118. 3, 180. 28
- Sahamāna  
AV ii. 25.2  
iv. 7.2  
viii. 2.6 ; 7.5
- Śaileya  
R VI. 51  
RS VI. 25  
AK III. 125
- Saireyaka  
AK 99. 75
- Śairya  
Species of grass infested  
with insects.  
Rv. i. 151. 3
- Śāka  
*Tectona grandis* L. f.  
UV 25
- Sāla  
*Shorea robusta* Gaertn.  
R 1. 38  
K XIII. 33  
Exudes fragrant sop.  
AK 92. 45  
Kad 369  
UV 7

VP 43. 6  
 MP 154. 576, 161. 57, 257.  
 8.  
 Recommended for building  
 purposes.

Salāñjalā  
 Grain creeper  
 AV. vi. 16.4  
 Kaus. Sūtra, ii. 16

Śāli  
*Oryza Sativa* (a variety)  
 R IV. 20; XV. 78; XVII. 53  
 Rs. III. 1, 10, 16; IV. 1,  
 8, 18; V. 1, 16.  
 H 100

Sallaki  
 V. IV. 44  
 K VIII. 33  
 Elephants feed on its leaves.  
 Emits sweet smell  
 when broken.  
 AK 112. 124  
 Kad 83  
 MP. 217. 65, 218. 2  
 Recommended for storing  
 in a fort.  
 UV. 10

Śālmali  
*Salmalia malabarica* Schott.  
 RV VII. 50.3 (Fruit poi-  
 sonous). X. 85.20 (Bridal  
 car made of its wood)  
 Taitt. Sam. vii. 4. 12.1  
 (Tallest of trees)  
 Vāj. Sam. xxiii. 13  
 SB xiii. 2. 7. 4  
 PBr. ix. 4.11 etc.  
 Pan IV, 2. 82

SB 13. 2. 7. 4  
 RS I. 26  
 MP 161. 57  
 Vi. 61.5  
 AK 92. 47  
 UV 198  
 One of the trees whose  
 barks, powdered and  
 mixed with some other  
 substances, should be  
 applied to the root of a  
 cotton tree to ensure  
 cotton of the colour of  
 the wing of a parrot.

Śāluka  
*Nymphaea lotus* L  
 AV iv. 34.5  
 MP 217.52

Samala  
 MP 118.3

Samanga  
 MP. 217. 77, 218. 5  
 Recommended for storing  
 in a fort.

Samarataka  
 MP 118. 7

Śamī  
*Prosopis spicigera*. *Minosa*  
*Suna*  
 AV vi. 11.1 (wood used as  
 lower *araṇi* for kindling  
 fire) 30. 2.3 (destroys hair)  
 Taitt. Sam. v. 1. 9.6, 4 7.4  
 (Wood used as lower  
*araṇi* for kindling fire).  
 Kāth. Sam. xxxvi. 6  
 Taitt. Br. i. 1. 3.11 *et. seq.*  
 6. 4. 5

- SB ii. 5.2; 12, ix. 2.3.37 etc.  
 Vi 61.4  
 MP 93. 27, 118. 10. 255. 23  
 IV 3. 142  
 Pan. V 3. 88  
 A IV 3  
 R VII 26  
 AK 93. 52  
 UV 7  
 Supposed to contain latent fire.  
 The smell of its flower is as strong as that of the elephant's ichor. In AV said to cause intoxication.  
 Broad-leaved.
- Samidh  
 MP 93. 27
- Śamīdhānya  
 MP 217. 52  
 Recommended for storing in a fort.
- Samīrana  
 UV 13
- Śaṇa  
*Crotolaria juncea*  
 AV ii. 4.5 (said to grow in forests. Remedy against Viṣkāṇḍha.)  
 SB. i. 6. 1. 24 ; 2.15 iii. 2.1 11.  
 VI 61.5  
 UV 33  
 MP 217. 39  
 In MP recommended for storing in a fort.
- Śaṇapuṣpikā  
 AK 107. 107
- Śaṃkhaṇḍī (kā)  
*Canscora decussata* R & S  
 AV VII 38.5  
 B II. 1. 21  
 Vas XXVII 11  
 UV 33  
 MP 267.15
- Śaṃkhinī  
*Xanthium strumarium* L  
 AK 113. 127
- Sāṇḍadūrvā  
*Cyperus rotundus*  
 AV xviii 3.6
- Santāna  
 MP 92.6 etc
- Saphaka  
*Trapa bispinosa*  
 AV iv 39. 5  
 Āp Sr, Sūtra, ix 14.14
- Saptacchada  
 R V 48  
 RS III 2, 13  
 Kad 91
- Saptaparṇa  
 (Saptaparṇī—*Alstonia scholaris* R. Br.)  
 A I. p. 38.  
 R IV. 23.  
 MP. 118. 4, 161. 64-65, 217. 70.  
 AK. 85. 23.  
 KS. II. 2. 5.
- Śara  
*Saccharum arundanaceum*  
 RV. i. 191. 3  
 AV. iv. 7. 4 ; i. 2. 1 ; 3. 1  
 Taitt. Sam. V. 2. 6. 2 ; vi. 1.3.3

- Kāth. Sam. ix. 5, xxviii. 4  
 SB. ii. 2. 2; 4. 1; iii. 1.3.13  
 Bṛ Up. vi. 4. 11 etc.  
*Nirukta*, V. 4 etc.  
 B 1. 14. 11  
 Pan VIII. 4. 5.  
 Me. 47.  
 K VIII. 74, XI. 13.  
 R XIII. 26.  
 Its stem, when ripe, becomes very white. A woman's bright cheek is likened to it.  
 AK 122. 162.  
 MP. 118. 35.
- Sarala**  
 Me. 55.  
 K 1. 9.  
 R IV. 75.  
 Emits sweet smell when broken.  
 AK. 95. 60.  
 Kad. 369.  
 UV. 43.  
 MP. 161. 56, 257. 11.
- Saraṇa**  
 AK. 119. 153.
- Sarañja**  
 A I. 17.  
 R. V. 69.
- Sariva**  
*Ichnocarpus frutescens* R.  
 Br.  
 UV. 24.  
 MP. 217. 44.  
 Recommended for storing in a fort.
- Sarja (Sarjaka)**  
 RS. II. 17, III. 13.  
 VP. 78. 11.  
 MP. 118. 30, 217. 62, 266. 12.  
 VI. 61. 14
- Saroja**  
 KV. 27, IX. 17, XIII. 32.  
 Mal. V. 3.
- Saroruha**  
 K I. 16, IX. 27, XI. 21.
- Sarṣapa**  
 (Sarṣopa—*Braucanapus* L.)  
 Ch. Up. iii. 14.3  
 Sad. Br. V. 2  
 Sāṅkh. Sr. Sūtra iv. 15.8 etc.  
 VI. 79. 17  
 UV. 148  
 KS. IV. 1. 6  
 UV. states that powdered oil-cakes of white mustard, if applied to roots of Date-trees and Bel trees, help their luxuriant growth.
- Śaṣpa**  
 V. IV. 57  
 RS. I. 22  
 AK 123. 168
- Śaṣṭhika**  
 UV. 33
- Śatamūli**  
*Asparagus racemosus* Willd.  
 AK. 106. 101
- Sataparnī**  
 (Śatapattrī—*Rosa Centifolia* L.)  
 MP 95. 25, 217. 46

Recommended for storing in a fort.	Sidhraka
Sataprasa	SVB III. 6. 9
AK 99. 77	TB III. 4. 10
Śatapuṣpa (-i)	B II. I. 15
<i>Peucedanum sowa</i> Kurz.	Pan VIII. 4. 4
AK 119. 152	Śigru
KS IV. 1. 6	VL 61. 3, 79. 17
MP 217. 48	AK 87. 31
In MP recommended for storing in a fort.	YS I. 7. 171
Śatavāri (a)	MP 217. 62
<i>Asparagus racemosus</i> Willd.	In MP recommended for storing in a fort.
AV xix. 36	Silāci
AK 106. 101	A healing plant, also called
MP 217. 49	<i>Lākṣā</i> .
In MP recommended for storing in a fort.	AV V. 5. 1. 8
Sauvira	Śilāñjālā
MP 217. 58	Grain creeper.
Recommended for storing in a fort.	Silapatra
Savi (ti) naka	MP 217. 77
VP 8. 151	Recommended for storing in a fort.
Śelu	Śilindhra
MS V. 6	Me 11
AK 89. 35	Simbala
Śephālikā	RV III. 53.22
<i>Nyctanthes arbor-tristis</i> .	Simbi
RS III. 14	MP 118. 32
AK 98. 71	Simhī
Kad 77	AK 106.103
UV 42	MP 217.48, 267.15
Siddhārthaka	In MP recommended for storing in a fort.
MP 243. 18	Śimśapā (Śimśapā-drum)
Supposed to be auspicious at the time of storing on a military expedition, etc.	<i>Dalbergia sisu</i>
	RV iii. 53.19 (A stately and beautiful tree).
	AV XX. 129.7



Pan VII. 3.1  
 AK 96.63  
 UV 3  
 KS VII. 1.30  
 MP 118.3, 217.78, 257.10  
 Sindhuvāra  
 K III.53  
 Its flower is pearl-white.  
 AK 98.69  
 Kad 151  
 UV 25  
 MP 60.38 etc  
 Singiveran  
 UV 13  
 Sipāla  
*Blyxa Ceylanica*  
 RV X 68.5  
 AV vi. 12. 31  
 SB iii. 1  
 Later form Śaivala.  
 Sirapada  
 MP 118.54  
 Śirīṣa  
*Albizzia lebddek.* Benth.  
 Pan IV. 2.80  
 Me 71  
 A I. 4, 26 ; VI. 18  
 K I. 41 ; V. 4  
 R XVI. 48, 61 XVIII. 45  
 Used as ear-decoration by  
 women.  
 AK 96.63  
 UV 7  
 MP 56.6, 118.3  
 Sisapatra  
 KS VII. 2.21  
 Śiśu  
*Dalbergia sisso* Roxb.

UV 166  
 It is stated to grow luxuriantly if, being fumigated with barley, wine, fermented rice-water and clarified butter, its trunk is besmeared with cakes made of *viḍaṅga* and sesamum soaked either in milk or in *Kunapa* water. *Kunapa* denotes a corpse. Does it mean water with which a dead body has been washed ?  
 Śiśumāra (—mārī)  
 UV 138, 208  
 If it be found on stony ground, then 3 cubits north of the ant-hill adjacent to it and  $13\frac{1}{2}$  cubits below the ground water is to be found.  
 Sitāmbhoja  
 UV 10  
 Śītapāki  
 MP 217.51  
 Recommended for storing in a fort.  
 Sita-śāli  
 (Sitsal—*Dalbergia latifolia* Roxb.)  
 UV 80  
 Scattering boiled white Śāli rice, mixed with cud and rock salt around trees ensures their protection against poisonous rain injurious to them.

- Siva  
 (Śivaliṅga—*Couroupita guianensis* Aubi)  
 UV 24
- Ślakṣaparnī  
 KS VII. 2·37
- Śleṣmāntaka (Śleṣmātaka)  
 VI. 61·2  
 VP 69·135  
 AK 89·35  
 UV 29  
 MP 118·4, 257·8  
 This is one of the trees inauspicious for the residential house.
- Snuhi  
*Euphorbia neri folia* L.  
 H 410
- Snuk  
 AK 107·106
- Snyhistaka  
 KS VII. 2·30 ; 36
- Sobha  
 MP 118·12
- Sobhāñjana  
 AK 87. 31  
 UV 42
- Soma  
 (Somalatā—*Asolepias acida* Roxb.)  
*Sar costemna brevisigma*. *S. intermedium*. *Periploca aphylla*. *Ephedra vulgaris*. *Cannabis sativa*.  
 Kad 132  
 UV 25  
 KS VII. 2. 31, 36.
- Somabanaka  
 MP 217. 53.  
 Recommended for storing in a fort.
- Somarāji  
*Vernonia anthelmentica* Willd  
 AK 105. 96
- Somavalkya  
 UV 10
- Somavati  
 RV X. 97·7  
 A major medicinal plant.
- Sonaka  
*Crotolaria juncea* ?  
 AK 95. 58
- Spandana  
 RV iii. 53·19  
 Pan IV. 3. 141  
 A tree.
- Sphūrjaka  
*Diospyros perigrina*  
 SB xiii. 8. 1. 16
- Śraktya  
*clerodendran phlomidis*  
 According to commentators on AV viii. 5. 4. 7. 8, amulet, made of its wood.
- Śraṇapīṅgaka  
 KS VII 2. 37
- Srekaparna  
*Nerium odorum*.  
 Taitt. Br. iii. 6. 6. 3  
 AB ii. 6·15
- Śriparnī  
 KS VII. 1. 46  
 UV 25  
 MP 257·10, 274·32
- Śṛṅgātaka (-i)  
*Trapa bispinosa* Roxb.

KS VII. 1. 39, 43	Recommended for storing
MP 217. 45	in a fort.
In MP recommended for	Sukanasa
storing in a fort.	KS IV. 1. 29
Śṛṅgavera	Sukaraka
MP 118. 40	UV 33
Śṛṅgī	Sukasaka
AK 106. 100.	(Sukasa— <i>cucumis sativus</i>
AK 110. 117	L)
MP 217. 45	UV 8
In MP recommended for	Śukasimbi
storing in a fort.	AK 102.87
Stamba	Śukra
KS IV. 1. 6	MP 217.47
Sthalakamala	Recommended for storing
Me 97	in a fort.
A woman's beautiful feet	Sumukha
are likened to it.	MP 217.63
Sthalapadma	Recommended for storing
<i>Hibiscus mutabilis</i> L.	in a fort.
UV 25	Suradāru
Sthalāravinda	<i>Polyatthia longifolia</i>
K I. 33.	Same as Devadāru.
Stri	MP 257. 9
MP 217. 76	Recommended for building
Recommended for storing	purposes.
in a fort.	Suragoda
Sugandhikā	MP 118.38
UV 10	Surāṇa
Sugandhitejana	KS IV. 1. 29
<i>Andropogon squarrosus</i>	Suramandaka
Taitt. Sam. vi. 2. 8. 4	MP 96. 9
Kāth. Sam. XXV. 6	Surasa
A. R. i. 28.28	AK 109. 115
SB iii. 5. 2. 17	Sūryavalli
P. Br, xxiv. 13.5	(Sūryapatra— <i>Calotropis</i>
Śukadhānya	<i>gigantea</i> R. Br.)
MP 217.52	UV 14

## Susira

AK 118. 130

## Suvarcalā

Suvarṇaka—*Cattia fistula*

L

MP 118.30, 267.15

## Suvaha

AK 110. 119

AK 116. 140

## Svādukaṇṭaka

MP 118.29

## Svodhā

A plant.

AV VI. 96.3

## Svadhiti

RV v. 32.10

ix. 96.6

According to Roth, a huge tree with hard wood.

## Svarṇapuṣpa

UV 33

## Śvasantī

MP 217. 44

Recommended for storing in a fort.

## Śvetakadruma

MP 118. 23

## Svayamgupta

KS IV 1.29

VII 1.41, 43

## Śyāma

Me 109

RS III 18

A woman's delicate frame is compared to it.

AK 94.55

AK 109. 112

UV 14

## Śyāmāka

*Echinochloa colona*

AV xix 50.4; xx 35.12

(food of pigeons)

Taitt. Sam. i 8. 1. 2; ii 3.2

6; iv 7.4.2

Mait. Sam. ii 11.4

Vāj. Sam. xviii 18

Kāth. Sam. x 2

SB. x 6.3.2; xii 7.1.9 etc.

Kaus. Sūtra iv 12

Ch. Up. iii 14.3

B III 2. 15

VI 80. 1

A IV 13

The deer feed on it.

AK 123. 166

VP 78. 6-9

MP 217.72, 79, 266. 12

According to VP, its sticks are recommended for use in the Agrayāṇa offerings to Pitṛs.

## Śyāmalatā

UV 33

## Syandana

Same as Spandana (q.v.)

Kaus. Sūtra viii 15

MP 257. 11

Believed to be auspicious for building purposes if used alone. According to Roth, wood of a tree is meant.

## Sugandhi tejana

SB 3. 5. 3. 17

## Syonaka

MP 217. 76

Recommended for storing  
in a fort.

Tagara

*Tabernaemontana coronaria*  
Willd.

KS IV. 1. 7, VII. 1. 4, 9, 32;  
VII. 2. 41

UV. 47

MP. 118. 38, 217. 70

In MP, recommended for  
storing in a fort.

One of the trees growing  
from stems.

Tājadbhaṅga

*Ricinis communis*

AV. viii. 8·3

Kaūs. Sutra, xiv. 14

Takṣmaṇa

UV 21

Tāla (Tālī)

*Boranus flabellifert.*

Pan IV. 3. 152

Me 32

V V. 10

R IV. 34 ; VI. 57 ; XV. 23

AK. 113·127, 123. 169.  
124·170

Kad 71

UV 3

VP 37·23 f. f.

MP 96·9, 118·3, 161·57, 59,  
217, 49

In MP recommended for  
storing in a fort,

Grows on seaside.

Talāśa

*Flacourtia cataphracta*

AV. vi. 15.3

According to Whitney, same  
as *Tālisa* below.

Tālāsphoṭa

MP 217, 73

Recommended for storing  
in a fort.

Tālisa

KS VII. 1. 4, 9 ; VII. 2.  
41

MP 217. 70 (*Tālīsapatra*)

In MP recommended for  
storing in a fort.

Tamāla

AP. I. 2. 37

K III. 53

R VI. 64 ; XIII. 49

K IV. 1·6, VII. 1. 9

Kad. 60

AK 97. 68

UV 10

MP 118·3, 161·57, 65 ;  
180·25

Its bark is used in making  
girdles for Vaiśya  
Brahmacārins. Grows  
on seaside.

Tāmalakī

AK 113·127

Tāmarasa

K VIII. 26, 32

R VI. 37 ; IX. 12, 37

Tāmbūli (Tāmbūla)

R IV. 42 ; VI. 64

RS V. 5

AK 111·120

Kad 308

UV 47

One of the plants growing from stems. It grows in the Malaya region

Tandi

AV X. 4.25

Tañḍula

AP I. 2.37

Tantumāla

MP 118.8

Tāpiccha

AK 97.68

Tarkāri

UV 214

One of the plants a decoction made of (the leaves of) which, when sprinkled over a tree, is stated to render it devoid of fruits and flowers.

Tārṣṭāgha

A tree.

Kaus Sūtra. XXV. 23

AV. V. 29.15 (*tārṣṭāghī*)

Mustard plant, according to Weber.

Tila

*Sesamum indicum* DC

AV. ii. 8.3 ; iv. 7.3 ; vi. 140.2 ; xviii. 3.69 ; 4.32

Taitt. Sam. vi. 3.2

Vāj. Sam. xviii. 12

SR. ix. 1. 1.3 etc.

Br. Up. vi. 3.22 ; vi. 4.16  
(Tilaudana)

Ch. Up. V. 10.6 etc.

Sāṅkh. Āra. xii. 8

Sāṅkh. Āra. xi. 4

G VII. 20, XV. 26, XIX. 17

B II. 2.13, 14, 18 ; II. 6.2 ;  
II. 15.4 ; IV. 5.26 ; IV.  
6.4 ; IV. 7.9

AP. I. 20.13 ; I. 26.15 ; I.  
27.1. II. 16.22, II. 20.1.

Vas II. 39

VI. 79.17 ; 80.1 ; 87.8 ; 90.27  
VP. 8, 150

Its sale is forbidden (perhaps for Brāhmaṇas). It has to be eaten in certain expiatory rites (A. I. 26.15). Fit for use in *Śrāddha*. From B (II. 2.13) its use only for eating, inunction and gift appears to have been prescribed. Black *tila* has to be cast over a kind of cow given away in a certain mode of *Prāyaścitta*. (B II. 6.2). Living on *tila* only on full moon days throughout the year is a penance for expiating certain sins. *Kṛṣṇa-tila* is mentioned in VP. in connexion with *Śrāddha*.

Tilaka

K III. 30 ; VIII. 40

R I. 41, 44

Mal. III. 5

AK 90.40

UV. 8

MP 161.56, 180.35, 255.23

Tilaparnikā

KS IV. 1.29

- Tilapuṣpa  
MP. 118. 15.
- Tilva (Ka)  
*Symplocos racemosus*  
SB. xiii. 8. 1. 16  
Mait. Sam. iii. 1. 9  
Ṣaḍ. Br. iii. 8  
Yūpa stated to be made of  
its wood.  
VI. 61. 3.
- Timira  
UV. 10.
- Tinduka (Kī)  
VI. 61. 3.  
AK. 90. 39.  
UV. 10.  
MP. 161. 60, 257. 10.
- Tiniṣa  
UV. 10.  
(Ka, Tin tinī A II, p. 71)
- Tintiḍi  
*Tamarindus indica* L.  
AK 91. 44.  
UV 8.  
MP. 96. 7, 118. 22, 217. 55.  
In MP recommended for  
storing in a fort.
- Tokma  
AP I. 20. 12.  
Trade in it is prohibited.
- Trapusa  
*Cucumis sativus* L.  
KS. IV. 1. 29.  
VII. 2. 28.  
MP. 118. 27, 217. 51, 227.  
111.
- Trāyamāṇa  
AV. viii. 2.6
- AK 119. 151.
- Trivṛta  
UV 21.  
MP. 217. 77.  
In MP recommended for  
storing in a fort.
- Tūda  
AK 91. 42.
- Tulasī  
*Ocimum sanctum* L.  
UV 8.  
A sacred plant which sanc-  
tifies the house, and  
ensures the happiness of  
the householder in the  
other world.
- Tumbara  
MP. 118. 14.
- Tumbi  
AK 120. 156.  
MP 217. 73.  
In MP recommended for  
storing in a fort.
- Tuṇḍira  
MP 96. 7.
- Tunna  
(Toona—*Cedrela toona*  
Roxb.)  
AK 113. 128.
- Tuṣaparnī  
MP 217. 72.
- Tuvarikā  
AK 113. 131.  
MP. 217. 76.
- Tvagdruma  
MP. 118. 25.
- Uccarakanda  
KS. VII. 1. 35

- Uccaṭā  
AK 121. 160
- Udāra  
VP 8. 151.
- Udjasā  
RV x. 97.7  
A major medicinal plant.
- Udumbara  
*Ficus glomerata*.  
AV. xix. 31.1 (Amulet)  
Taitt. Sam. ii. 1.1.6  
P. Br. xvi. 6.4 (forests of Udumtara)  
SB. iii. 2.1.3  
VII. 4. 1.38 etc.  
Taitt. Sam. iii. 4.8.4 V. 47, 3  
(Wood used for ritual purpose. *Yūpa* and ladle made of its wood.)  
AB V. 24 (fruit ripens three times a year) viii. 13  
fruit sweet as honey.  
S. B. 6. 6. 3. 2.  
AP. I. 2. 38.  
V XI. 54, XXVII. 12.  
Pan. IV. 3.152  
Me. 44  
AK. 85.22  
UV. 3  
VP. 75.67  
MP. 217.78, 255.20, 265.31  
The staff of a Vaiśya Brahmacārin is made with its wood. According to V (XXVII. 12), used to prepare a decoction to be taken by one who has committed certain kinds of sins. According to VP sticks, fruits and vessels, made of its wood are good for *Śrāddha*.
- Udumbaraparṇi  
AK 117. 145
- Ugragandhā  
AK 106. 103.
- Uhu  
UV. 9
- Ulapa  
*Imperata arundinacea*  
RV. X. 142  
AV. vii. 66.1  
Vāj. Sam. xvi. 45  
Mait. Sam. I. 7.2 (*upolapa*)  
AK 81. 9
- Upavāka  
*Wrightia tinctoria*  
Vāj. Sam. xix. 22-90  
xxi. 30 (stated to have healing property)  
SB. xii. 7.1.3 ; 2.9 etc.
- Upodaka  
AK 121. 158
- Upolapa  
Same as *Ulapa* above.
- Uraṇākṣa  
AK. 118. 148
- Ūrjayanti  
RV. X. 97.7  
A major medicinal plant.
- Urupuṣpikā  
MP. 217. 51  
Recommended for storing in a fort.
- Uruvūka  
AK 93. 51



Urvārū (ka)	K IV.8 ; VII. 20. 81
<i>Cucumis melo. C. sativus.</i>	R III. 36 ; VI. 42 ; VII.
AV. vi. 14.2	26 ; XII. 86, XIII. 31
RV. vii. 59.12=AV. xiv.	RS. II. 9, 14, 15 ; III. 14,
1.17=Mait. Sam. i. 10.4	24 ; V. 10
=Taitt. Sam. i. 8.62=	K IX. 26, XVII. 35
Vāj. Sam. iii. 60	KS. VII. 1.6. 8 ; VII. 2.
P. Br. ix. 2.19	35
Uṣaṇā	AK 68. 37. 122. 126.
<i>Piper longium</i>	UV. 10
<i>P. peepuloides</i>	Utpalaśārīvā
SB. iii. 4.3.13 ; iv. 2.5.15	AK. 109. 112
AK 105. 97	Vacā
Uśīmāra	<i>Acorus calamus</i>
UV. II.	AK 106. 103
Uśīra	MP 267. 14
<i>Andropogon squarrosus</i>	UV 13
Hack.	Vadarī
A. 1. 84	<i>Zizyphus jujube</i> Lamk.
AK 122. 164	UV 8
AK 122. 164	Vaiṣṇavī
UV 13	Does it denote Tulasī and
VP 75. 32	Aparājītā ? If so, for
MP 217. 68, 266. 13 etc.	botanical names see those
Mentioned in VP in con-	words.
nexion with <i>Śrāddha</i> .	MP 266. 14
In MP recommended for	Vajrakāṇḍa
storing in a fort.	KS VII. 2. 41
A soothing unguent appears	Vakula (See Bakula)
to have been prepared	Valgujā
from it.	KS VII. 2. 36
Utkatā	MP 118. 23
MP 217.50	Vallaka
Recommended for storing	UV 17
in a fort.	Vallīphala
Utpala	UV 8
Me 26	Vālukā
A I. p. 27	MP 96. 5

**Vamśa***Bambus arundinaea* Willd.*Bambusa tulda*.

Pan V. 1. 50

Me. 87

RS 1. 25

AK 121. 161

H 410

UV 12

**Vamśīkarīra**

VP 78. 11

It is a taboo in *Śrāddha*.**Vanaja**

R V.73

**Vanajayanti**

UV 60

**Vānaparṇi**

Water plant.

AV iii. 18.1

**Vanaspati**

G III. 20, XII. 25

B I. 8. 26

Ap. 1. 7. 4, I. 11. 5, I. 17, 19,

I. 30. 24, II. 2. 4

A IV. p.p. 130, 131

The tearing of its leaves and  
flowers is forbidden.**Vana-tarkāri**

UV 60

**Vandhūka**

VI. 61

**Vānīra**

Me. 43

R XIII. 30, 35 ; XVI. 21

AK 87. 30

UV 10

**Vañjula***Saraca indica* L.**UV 10****Vañkoṭa**

AK 87. 29

**Vārāhi**

AK 119. 151

UV 24

**Vara-karkāri**

UV 194

One of the trees whose  
barks, pasted with and  
boiled in milk, can stop  
the exudation of trees.**Varaṇa***Cratoosva murvalla*

AV vi. 85. 1; x.3. 1; xix.

32.9

P.Br. v. 3. 9. 10

SB. xii. 8. 4. 1

Pan IV. 2. 82

AK 86. 25

**Varhis**

K I. 60

**Vārija**

K XV. 12

**Vāriparṇi**

UV 10

**Vāriruha**

K VIII. 33

**Variṣṭaka**

MP 118. 24

**Varṣābhū**

MP 217. 45

Recommended for storing  
in a fort.**Vartadbhrantapatra**

KS VII. 1. 25

**Vartaka**

KS. IV. 1. 29

- Vārtāki (-U, -a)  
*Solanum melongena*.  
 AK 109. 114  
 Vi. 79. 17  
 UV 8  
 MP 118. 28
- Varuṇa (-Ka)  
 UV 22  
 MP 161. 60
- Vāsika  
*Adhatoda vasica* Nces.  
 UV 14
- Vāstuka  
 AK 121. 158  
 UV 8
- Vaṭa  
*Ficus benghalensis* L.  
 Pan VI. 2. 82  
 R XIII. 53  
 AK 88. 32  
 UV 3, 7  
 VP 30. 250  
 MP 96. 11  
 In MP it is stated that this tree, growing to the east of a house, fulfils all desires.
- Vātāma  
 MP 217. 353
- Vātapoṭha  
 AK 87. 29
- Vatsanābha  
 MP 161.60
- Vāṭyālaka  
*Sida cordifolia* L.  
 AK 107. 107
- Vayaḥsthā  
 MP 217.64
- Recommended for storing in a fort.
- Veṇu  
*Bambusa* sp.  
 MP 118.35  
 VP 75  
 Its leaves are recommended for use in *Śrāddha*.  
 B I. 14. 11.  
 AK 121. 161
- Vetasa  
*Calamus tenuis* Roxb.  
 Pan IV. 2. 17  
 A II. p. 60 ; III. pp. 87, 113  
 R IX. 75  
 AK 87. 29  
 H 387  
 UV 10  
 KS VII. 2. 19  
 MP 118,10, 217.73  
 Pleasure-bowers appear to have been made with *Vetasa* plants.
- Vetula  
 UV 14
- Vibhitaka  
*Terminalia belerica* Roxb  
 RV iii. 86.6 ; x. 34.1  
 AV (Paippalāda) xx. 4.6  
 Its fruit used in making dice  
 RV VII. 86.6  
 X. 34.1  
 VI 61.2  
 Ap II. 25.12  
 Pan IV. 3.152  
 MP 161.62, 257.7

- MP forbids its use for building purposes.
- Viḍaṅga**  
 AK 107.107  
 MP 118.22  
 UV 16
- Vidāri**  
*Ipomoea paniculata* R. Br  
 KS VII. 1.37, 38, 41  
 MP 118.29
- Vidāryā**  
 MP 217.45  
 Recommended for storing in a fort.
- Vidruma**  
 MP 217.78  
 Recommended for storing in a fort.
- Vidūsāra**  
 MP 118.30
- Vihalha**  
 A plant  
 AV vi. 16.2
- Vikaṅkata (Vikantika)**  
*Flacourtia vamentchi*  
 Taitt. Sam. iii. 5.7.3 ; vi. 4.10.5  
 Kāth. Sam. xix. 10  
 Mait. Sam. iii. 1.9  
 AV xi. 10.3  
 SB i. 2.4, 10 ; V. 2.4.18 etc.  
 Pan IV. 3.141  
 R XI. 25  
 AK 90.38  
 Sacred. Ladles for sacrifice were made of it.
- Virāṇa (Virina)**  
*Andropogon muricatus*
- SB xiii. 8.1.15  
 MP 217.47  
 AK 122.164  
 UV 117  
 Four and a half cubits below the ground, where this is seen, water is to be found. In MP recommended for storing in a fort.
- Viravṛkṣa or Virā**  
 AK 91.43  
 MP 217.44  
 Recommended for storing in a fort.
- Virīṇa**  
 SB 13.8.1.15
- Virudh**  
 G XII. 25
- Viṣā**  
*Aconitum napellius* L  
 MP 217.69  
 Recommended for storing in a fort.
- Viśalyakaraṇī**  
 MP 122.56
- Viṣanakā**  
*Gymnema sylvestre*  
 RV vi. 16.20 ; xi. 96.8  
 AV vi. 44.3 ; ix. 8.20  
 (remedy against disease)
- Viṣaṇī**  
 MP 217.73  
 Recommended for storing in a fort.
- Viṣṭara**  
 Pan VIII. 3.93
- Viśvadeva**

- MP 217.48  
Recommended for storing  
in a fort.
- Vitunna  
AK 118.149
- Vrihi  
*Oryza sativa*  
AV vi. 140.2 ; viii. 7.20 ;  
ix. 6.14 etc., xi. 4.13  
Taitt. Sam. 8.10.1 vii. 2.  
10.3 (Said to ripen in  
autumn.)  
Kāth Sam. x. 6 ; xi. 5  
Mait. Sam. iii. 10.2 ; iv. 32  
Vāj. Sam. xviii. 12  
AB ii. 8.7 ; 11.12 ; viii. 16.  
3. 4  
SB V. 5.59  
Br. Up. vi. 3.22  
Ch. Up. iii. 14.3 ; v. 1.5 etc.  
J. B. i. 43  
G VII. 15  
B I. 14.12  
Ap. II. 6.16, II. 16.22, II.  
23.9  
VI. 80.1  
Fit for use in *Śrāddha*.  
UV 148  
VP 8.150  
Certain trees are stated to  
grow if watered with  
paddy washings.
- Vṛṣyā  
MP 217.44  
Recommended for storing  
in a fort.
- Vyāghraṇakha  
*Martynia diandra* Roxb.
- AK 113.129  
MP 217.72  
Recommended for storing  
in a fort
- Vyāghrapada  
UV 24
- Vyāghri  
MP 267.14
- Vyaikasā  
Water plant  
RV X. 16.3  
Said to grow on spots  
where dead bodies are  
burnt.
- Yajñādumura  
*Ficus cunia* Ham or *Ficus  
glomerata* Roxb.  
UV 55
- Yājyā  
MP 217.63  
Recommended for storing  
in a fort
- Yaṣṭimadhu (ka)  
*Glycyrrhiza glabra*  
AV i. 34.5 (Used for virility  
and sexual pleasure).  
AK 108.110  
UV 202  
One of the ingredients  
which, after being pasted  
together, are applied to  
the root of a tree to  
ensure fruits without  
seeds within.
- Yava (ka)  
*Hordeum vulgare* L.  
RV i. 23.15 ; 66.3 ; 117.21 ;  
135.8 ; 176 ; 2 ; ii. 5.6 ;

- 14.11 ; v. 85.3 ; vii. 3.4 ;  
viii. 2.3 ; 22.6 ; 63.9 ;  
78.10 ; x. 71.2 etc.  
AV ii. 8.3 ; vi. 30.1 ; 50. 1.  
2 ; 91.1 ; 141.2 ; viii.  
7.20 ; ix. 1.22 ; 6.14 ; xii.  
1.22  
Taitt. Sam. vi. 2. 10. 3 ;  
4. 10. 5 ; viii. 2. 10. 2  
Kāth. Sam. xv. 10  
Mait. Sam. iv. 3.2  
Vāj. Sam. v. 26  
Taitt. Br. i. 8. 4. 1  
SB i. 1. 4. 20 ; ii. 5. 2. 1 ;  
iii. 6. 1. 9. 10 ; iv. 2. 1. 11  
xii. 7. 2. 9  
Ch. Up. iii. 14.3 *ct. seq.*  
Kaus'. Br. iv. 12  
G VII. 15  
B III. 6. 4-10, III. 8.35  
VI. 79.1  
Vp. 8.150  
K VII. 17.82 ; VIII. 62  
R IX. 43 ; XIII. 49 ; XVII.  
12
- UV 28, 33  
Shoots of it appear to  
have been used by  
women as ear-ornaments.  
Used in religious rites.  
Very sacred and capable of  
washing off many sins.
- Yavānikā  
*Carum copticum* Benth.  
AK 117.145
- Yavasa  
AK 103.92  
MP 118.10
- Yūthikā  
*Jasminum auriculatum* Vatl.  
Me 26  
V IV. 46  
RS II. 24  
AK 98.72  
H 455  
MP 118.14  
Women appear to have  
used it for decorating  
their hair.



# FAUNA





## INTRODUCTION

Human beings have been co-existing with beasts and birds ever since the beginning of creation. Some of these were hostile while others hospitable. They had to fight and kill the ferocious beasts and birds, and various weapons had to be devised for the purpose. The flesh of some of these was edible to them. Preying upon wild animals was thus a necessity for

their self-preservation. As there was transition from the hunting stage to the agricultural and pastoral one, man learnt to domesticate certain beasts and birds. Some of the animals were used for drawing ploughs. In course of time, some of them were employed as beasts of burden and the milk of some came to be used as food. The hairs of some animals were used for covering the body against cold.

The picture of wild life and animal kingdom was not different in India. The ruins of the Indus Valley civilisation, roughly dating back to a period round about 3000 B.C. bear eloquent testimony to the awareness about and the popularity of certain animals. The figures of such animals as the elephants, the tiger, the rhinoceros, the buffalo and the deer show that the people were fond of or had admiration for these beasts.

Before dealing with the zoological information contained in Sanskrit words it should be noted that the word 'jantu' does not necessarily mean a beast. It means any creature. In MS iii.77 *jantu* is explained as a creature that takes the help of wind to live. In RV. 1.45.8, even a man is called *jantu*. This word, occurring in the *Abhijñānaśakuntala* (V.2), refers to human beings.

The *R̥gveda*, the earliest written record of not only the Indians but also of the Indo-European people, is replete with references to beasts and birds. Of the domestic animals, the cow is mentioned most frequently. The horse is also common. Among the other animals are the following: *Vṛka*, lion, tiger, elephant, ass, mule, dog, buffalo, camel, goat, sheep, boar, deer, monkey, mongoose, hare, *godhā* (alligator). Among reptiles, serpents are mentioned. Among small creatures and insects are the scorpion, mouse, frog, etc. The abominable fly is ubiquitous.

Among aquatic creatures, some of which are not specified, we find the fish.

Among the winged creatures, we find the following<sup>1</sup>: *Cāṣa*, *Cakravāka*, *Ulūka*, *Mayūra*, *Suparṇa*, *Haṃsa*, *Gṛdhra*, *Kikidivī*. The most frequently mentioned bird is the *Śyena*.

1. The Sanskrit names are mentioned. These will be identified, as far as possible, in due course.

In the Brāhmaṇas (e.g. *Śatapatha*, 26.213 ; 41.40 f.n. ; 43.211, 277) we find two broad classes of animals, viz. *grāmya* (rural) and *āraṇya* (wild). The cow continues to enjoy the reverence of the people. In point of vigour, speed, etc. the horse has been accorded an exalted position. *Aśvaḥ paśūnām bhagitamah* (*Śatapatha* 6. 3. 3. 13)—the horse is the most fortunate and favoured of all animals. This single line epitomises the attitude of the people of this age towards this animal. Other attributes of this ancient animal are *Vīryavattamah* (the most heroic, *ibid*, 13. 1. 2. 5) *ojasvitamah* (the strongest *ibid*, 13. 1. 2. 6), *Yaśasvitamah* (the most famous *ibid*, 13. 1. 2. 8), etc.

Various species of the deer have been mentioned in the Brāhmaṇas. Among other animals are mentioned the goat, mule, camel, porcupine, wolf, elephant, lion, wild cow (*gavaya* or *gomṛga*), cat, wild dog or hyena (*salāvṛka*), tiger.

Among small creatures are the tortoise, the frog, the mouse and the *gaṇḍūpada* or earthworm.

Various types of serpents are mentioned in the Brāhmaṇas. The main types are *nirdamśī* (*Aitareya*, 3. 12. 2) (that which does not bite), *Svaja* (double-headed), *manthāvala* (living on trees and hanging from branches), *andha* (blind). A peculiar type is *śākala*. It is stated to be moving about with its tail in the mouth (*Aitareya*, 3. 14. 5). Huge serpents living in water and those having eyes like burning embers are referred to.

The *godhā* or iguana is mentioned in this literature. The *Kṛkalāsa* or chameleon also appears.

The aviary of the society of Brāhmaṇas also reveals a variety. *Śyena* (hawk, falcon) *Haṁsa* (swan), *Kalaviṅka* (sparrow), *Tittiri* (partridge), *Vāja* (falcon), *Kapiñjala* (hazel cockatoo), etc. are found in it.

Of the insects, bees and ants are common.

As some trees have been fancied as monarchs, Brāhmaṇas etc., so in animal kingdom, too, the tiger has been conceived as Kṣatriya, and king among the beasts and the lion as their *īśa* (lord).

Pāṇini broadly divides creatures into two classes, viz. animate (*prāṇin*—IV. 3. 135, 154 ; also *prāṇabhrt*—V. 1. 129) and inanimate (*aprāṇin*—II. 4. 6, V. 4. 97). These two are

called respectively *cittavat* (V. 1. 89) or that which has mind, and *acitta* (IV. 2. 47) or that which is devoid of mind. The animate beings are sub-divided into human beings (*Manuṣya*—IV. 2. 134) and animals (*Paśu*—III. 3. 69). Animals are classified as rural or domestic (*grāmya*—I. 2. 73) and wild (*āraṇya*—IV. 2. 129). There are minor sub-divisions of animals too, e.g. *Kṣudra-jantu* (II. 4. 8) according to size, and *Kravyād* (III. 2. 69) or that which is carnivorous.

That considerable Zoological knowledge was possessed by people in that remote age is attested by Pāṇini. He refers to the determination of the age of an animal by the number of its teeth (V. 4. 141), the growth of horns (VI. 2. 1) and hump (V. 4. 146). The words *dvidan* (possessed of two teeth), *asaṃjāta-kakut* (without the growth of the hump), *aṅgula-śṛṅga* (with horns of the length of one *aṅgula*), *Caturdan*, *śoḍan*, *pūrṇa-kakut*, *Vdgata-śṛṅga*, etc. point to this knowledge.

From the words *dyihasti*, *trihasti* (Pan. V. 2. 38) it appears that the height of an elephant constituted a measure. The capacity for killing an elephant was a sign of valour, as conveyed by the term *hastighna* (Pan. III. 2. 54). That an elephant was driven with a goad is known from the word *totra* (Pan. III. 2. 182) denoting this instrument.

The Dharmasūtras mention a number of beasts, birds, aquatic creatures, etc. The beasts, mentioned in them, admit of four broad divisions, viz. (1) *Eka-śapha*—having one hoof, (2) *Dvikhurī*—having two hoofs, (3) *Pañca-nakha*—having five nails, (4) *Ubhayatodat*—having two rows of teeth, one each in the upper and lower jaws.

Birds appear to have been broadly classified as (1) *Vikira*, *Viṣkira* or *viviṣkira* (A I. 17. 32 ; B 1. 12. 7 ; V XIV. 48) ; (2) *Pratuda* (A. 1. 17. 33 ; G. XVII. 33) and (3) *Kravyāda* (A. 1. 17. 34).

Of these, the birds of the *Viṣkira* type are so called as they eat insects, corns, etc. after scratching the earth or scattering them with their legs. B (1. 12. 6) names the following as belonging to this class : *Tittiri*, *Kapota*, *Kapiñjala*, *Vārdhrāṇasa*, *Mayūra*, *Vāraṇa*.

*Pratuda* is the name of that class of birds which eat things

after pecking them with their beaks. The *dārvāghāṭa*, probably denoting a wood-pecker, appears to belong to this class.

*Kravyāda* denotes that kind of birds which subsist on flesh alone ; e.g. *grdhra*.

Other minor types were the *Rakta-pāda* (possessed of red legs), *Rakta-tuṇḍa* (having reds beaks), *Jālapāda* (web-footed).

From A (1. 17. 36), as explained by Haradatta, *Lakṣmaṇa* appears to have been a general name applied to birds having white or red heads.

The principal kinds of fish, mentioned in the Dharmasūtras, may be broadly classified as (1) *Vikṛta-rūpa*—misshaped and (2) *Avikṛta-rūpa*—having a regular shape.

It is interesting to note that, at some places, the word *Matsya* appears to denote not only fish, but other aquatic creatures too (e.g. A.L. 17. 39 ; V. XIV. 41).

There is no work, known so far, dealing exclusively with fish. The *Matsyavinoda* section of the *Mānasollāsa* of Someśvara appears to be the only work which, though dealing mainly with angling, contains considerable information on varieties of fish. In this work, different kinds of fish are broadly divided into two classes, viz. marine and riverine. Each of these is sub-divided as scaleless and scaly. These are further divided as large, medium and small. Of the marine class, six scaleless and three scaly varieties are mentioned. Under the riverine class, it mentions twenty-one varieties of which six are scaleless and fifteen scaly. A few species of peculiar habits and habitats have been separately mentioned. In all, the work mentions thirty-seven varieties.

It is wrong to think that ancient Indians knew very little about fish, and to ichthyology their contribution has not much value. That fish was not only very familiar but also a subject of study is proved by ichthylatrical references. The very first incarnation of God is named *Matsya* (fish). A goddess is designated as *Mīnākṣī* (having eyes like those of a fish) ; *mīna* means fish. This name is significant ; it, perhaps, refers to the phenomenon that the eyes of a fish do not close even when it sleeps. Thus, *mīna*-like eyes probably symbolise the kinetic energy of the goddess. One of the epithets of Cupid is *Mīna-ketana*

(having a fish as his banner) In the *Śatapatha Brāhmaṇa* there is the famous story of the Deluge in which a fish, reared up by Manu, is stated to have rescued him.

Fish appears in the remote Vedic age as an article of food. The epics refer to fish not only as an item of food<sup>1</sup> but also as causing great satisfaction to the manes<sup>2</sup> if offered in *Śrāddha*.

From the MS. the important rôle, played by fish in life, is evident. The wide use of fish as food<sup>3</sup> is attested by V.16 which mentions several species which are prescribed as offerings to gods and manes. Manu (VII. 20) refers to the practice of roasting fish on a stake.

The intimate familiarity of the ancient Indians with the finny world is clear from the word *mātsya-nyāya* used at various places (e.g. *Arthaśāstra*, Book I Chap. 13) to denote anarchy and consequent confusion. It means the devouring of the small fish by the big ones.

The Tantras include *matsya* among the *pañcamakāras* regarded as a *sine qua non* for Tāntric *Sādhana*.

The Purāṇas contain many references to fish and fish-eating,

The *Suśruta-saṃhitā* (Sūtrasthāna, Chap. 46, the *Anūpa* Group 26) testifies to a good deal of knowledge relating to fish.

The very fact that there are several words denoting fish, each term referring to a characteristic feature of this creature, indicates the profound knowledge of the ancient Indians regarding the habits and habitat of fish. References to fish and the various terms, denoting fish, with their corresponding meanings, are set forth below :

1. *Matsya*

It literally means that which intoxicates or delights.

2. *Prthūroman*

Having big hair. It, perhaps, denotes a particular species rather than fish in general. It appears to correspond to the

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1. E.g. *Rāmāyaṇa* (Aranya, 73.14)

*Mahābhārata* (Cr. ed), Śānti, 37.17

2. E.g. *Mahābhārata*, Anu, 88.5

3. MS. V 15 prohibits fish in general, the prohibition applying perhaps to Brāhmaṇas only ; the *Mahābhārata* (Śānti, 37/17 clearly prohibits fish for Brāhmaṇas.

English name cat-fish. *Śakula*, *Śakalina* or *Śekulina* means a species having scales. It may be added that MS. (V. 16) recommends scaly varieties as food and offering to gods and manes. The *Mahābhārata* (Śānti, 37.17) prohibits scaleless fish for Brāhmaṇas.

*Kaṇṭakin* (having bones) and *Śuṅgin* (having horn) are terms indicating some other species.

### 3. *Jhaṣa*

It refers to the characteristics of killing small fish and other aquatic creatures.

### 4. *Mīna*

In one sense, it is synonymous with *Jhaṣa*. According to some, it means 'scattering or splashing water'. It may be noted that this predatory propensity of fish is also conveyed by the word *ātmāśīna* (eating itself or its own species).

The following terms denote characteristics common to all fish :

*Viśāra*, *Vikāra* or *Vaisāriṇa* (signifying dignified movements of fish), *Aṇḍaja* (form of eggs), *Mūka* (speechless), *Animiṣa* (winkless), *Jaleśaya* (lying in water), *Uṣa* (glowing), *Sandhalina* (having eye-shaped marks), *Sudarśana* (good-looking), *Śalkin* (scaly<sup>1</sup>), *Samvara* (that which covers or spreads over).

Among the animals, frequently used by the king in war, hunting excursions and for joy ride, the elephant and the horse are the commonest. It is, therefore, natural that we find systematic works dealing with the taming, training and rearing of these animals and also with the treatment of their diseases. Besides elephant-lore and horse-lore we find veterinary science developed to a considerable extent in ancient India. The zoological knowledge of the Indians of those far-off ages is attested in the classification of elephants and horses and the description of signs for ascertaining their quality.

The *Manu-smṛiti* (i. 4) broadly divides worldly objects into *sthāvara* (non-moving) and *jaṅgama* (moving).

There is (i. 43-45) a broad division of the latter into *jarāyujā* (viviparous), *aṇḍaja* (oviparous) and *svedaja* (born out

1. The number of fishes, devoid of scales, is smaller.



of sweat). The first class comprises human beings and beasts. To the second class belong birds, serpents, crocodiles, fish, tortoises. The creatures of this class are sub-divided into *sthalaja* (growing on land) and *audaka* (aquatic). *Svedaja* are gad-flies, mosquitoes, lice, flies, bugs and others like ants which are born out of heat. The MP (1.31) divides moving creatures into four classes, viz. *Svedaja*, *aṇḍaja*, *jarāyuja* and *udbhijja*. The same Purāṇa classifies (237.1-2) the animal-kingdom under four heads, viz. *āraṇya* (wild), *grāmya* (rural or domesticated), *jalodbhava* (aquatic) and *sthalaja* (growing on land). This Purāṇa broadly divides (39.112) animals into two classes, viz. quadrupeds, bipeds.

Virtually the same classification is found in the VP (23.101, 69.298 f.f. etc.)

The same division of creatures is found in the *Caraka-saṃhitā* too (*Śārīrasthāna*, Chapter III) which adds *Udbhijja* (born of vegetable organisms).

Praśastapāda, in his commentary on the *Vaiśeṣika-sūtra*, divides creatures into two broad classes—*ayonija* and *yonija*. To the former class belong the small creatures which are generated without any sexual act. The latter class comprises those which are sexually generated. It is sub-divided into *jarāyuja* and *aṇḍaja*.

Small creatures (*kṣudrajantavaḥ*) are of several kinds according to the *Mahābhāṣya* (II. 4.1), viz. (1) animals without bones, (2) those devoid of own blood, (3) those minute ones more than a thousand of which can be contained in a palm, (4) those not easily crushed, (5) all animals up to ichneumons (in the animal series).

Suśruta adds *Samśvedaja* to the three classes mentioned by Caraka. It means those born of moisture and heat. As examples of this class are mentioned *kṛmi* (worm), *kīṭa* (insect), *pipīlikā* (ant).

The *Chāndogya Upaniṣad* (Prapāṭhaka, 6, pt. 3) divides creatures in accordance with the *bīja* (ovum or seed). These are (1) *aṇḍaja*, (2) *jīvaja* which is the same as *jarāyuja* above and (3) *Udbhijja*. Śaṅkara, in his commentary, states that *svedaja* creatures should be included partly under *jīvaja* and partly

under *Udbhijja*. The idea seems to be that there cannot be generation without *bīja* and an inorganic matter without *bīja* cannot produce animal life. Patañjali, however, holds (*Mahābhāṣya*, 1.4.3) the contrary view. According to him, vegetable organisms like grass grow from inorganic matter. As illustrations he points out scorpions which grow out of cowdung and *dūrvā* grass from heaps of the hairs of cows and sheep.

A fairly exhaustive classification is found in Umāsvāti's *Tattvārthādhigama*, a Jaina work (Chap. II, Sūtras 24, 34). The classification is primarily based on the number of senses possessed by the creatures concerned.

I. Those having the senses of touch and taste.

In it are comprised :

- (i) *Apādika*—vermes without lateral appendages, scolecids.
- (ii) *Nūpuraka*—like rings, with pendants. Vermes with unsegmented lateral appendages, annelids.
- (iii) *Gaṇḍūpada*—knotty-legged, arthropoda including Crustacea, Myriapoda, etc.
- (iv) Certain types of Mollusca, e.g. *śaṅkha* (conch), *śūkti* (pearl-oyster) and *śambuka* (helix).
- (v) *Jalūkā*—leeches, annelids.

II. Those having the senses of touch, taste and smell.

These include :

- (i) *Pipilikā*—ants (formicidae, Hymenoptera, Insecta)
- (ii) *Rohiṇika*—red ants (Do).
- (iii) *Upacika*, *Kunthu*, *Tuburaka*—bugs and fleas (Hemiptera and Siphonaptera Hemimetabola Insecta)
- (iv) *Trapusabīja* and *Kapāsāsthika*—cucumber and cotton—weevils and lice (Aptera, Ameta-bola, Insecta).
- (v) *Śatapadī* and *Utpataka*—spring-tails (Aptera, Ametabola). Centipedes (Chelicerata, Insecta)
- (vi) *Tṛṇapatra*—plant-lice. Aphids, Homoptera, Insecta.

- (vii) *Kāṣṭha-hāraka*—termites (white ants Isoptera, Hemimetabola, Insecta)

III. Those having the senses of sight, smell, taste and touch.

It comprises :

- (i) *Bhramara*, *Varāṭa*, *Sāraṅga*—bees, wasps and hornets (Hymenoptera, Holometabola, Insecta).
- (ii) *Makṣikā*, *Puttikā*, *Daṃśa*, *Maśaka*—flies, gnats, gad-flies, mosquitoes (Diptera, Holometabola, Insecta).
- (iii) *Vṛścika*, *Nandīvāarta*—scorpions, spiders (Arachnida, Arthropoda).
- (iv) *Kīṭa*—butterflies, moths (Lepidoptera, Holometabola, Insecta)
- (v) *Pataṅga*—grasshoppers and locusts (Orthoptera Hemimetabola, Insecta)

IV. Those having the five senses of sight, hearing, taste, smell and touch.

Besides human beings, this class includes.

- (i) *Matsya*—fish
- (ii) *Uraga*—apodal reptiles, including snakes (Ophidae).
- (iii) *Bhujāṅga*—oviparous limbed animals (limbed reptiles and Batrachians).
- (iv) *Pakṣī*—birds.
- (v) *Catuṣpada*—quadrupeds.

Of the above four main classes, the first three belong to the invertebrata class, and the fourth one to the Vertebrata.

The latter class is sub-divided into *aṇḍaja*, *jarāyuja*, *potaja* (placental mammals comprising the Deciduata excepting man, monkey and the carnivora).

Some works on Dharmaśāstra prescribe rules regarding the kinds of beasts, birds and fish that can be eaten especially by the upper castes, particularly Brāhmaṇas. Regarding beasts, the general rule is that, among the five-toed (*pañcanakha*) ones, the flesh of five species can be eaten. Some would add more to this number. For instance, Manu (V. 18) allows the flesh of the following as edible :

*Svāvidh*  
*Śalyaka*  
*Godhā*  
*Khaḍga*  
*Kūrma*  
*Śaśa*

The major works on Āyurveda also state beasts and birds of certain classes among those whose flesh can be eaten. The classification is based on the habitat and mode of life of these creatures. According to Caraka, these are

- (1) *Prasaha*—carnivorous and non-carnivorous, comprising land quadrupeds and birds which fall on their food with speed.
- (2) *Anūpa*—living in marshy lands or grazing on riverbanks.
- (3) *Bhūśaya* or *Vileśaya*—living in underground holes.
- (4) *Vāriśaya*—aquatic creatures.
- (5) *Jalacara*—amphibious.
- (6) *Jāṅgala*—living in dry and elevated jungle lands.
- (7) *Vişkira*—birds scattering their food while picking it up.
- (8) *Pratuda*—birds pecking their food with beaks.

In the chapter on diet, Suśruta broadly divides creatures into two classes, viz. *Anūpa* and *Jāṅgala*. The former is sub-divided into five classes and the latter into eight. Thus *Anūpa* comprises *Kulecara*, *Plava*, *Kośastha*, *Pādīna* and *Matsya*. *Kulecaras* are graminivorous quadrupeds living on the banks of rivers and ponds, and include the elephant, rhinoceros, *Gavaya*, the buffalo and various species of deer, etc. *Plavas* are amphibious birds. *Kośasthas* are shelled animals, e.g. *Śaṃkha*, *Śukti*, etc. *Pādīnas* are aquatic creatures having pedal appendages, e.g. *Kūrma*, *Kumbhīra*, etc. *Matsyas* are twofold, viz. those living in river-water and those living in sea-water.

The *Jāṅgala* class comprises the following :

*Jaṅghāla*—wild herbivorous animals which are strong-legged and flat-footed.

*Vişkira*—as above.

*Pratuda*—as above.

*Guhāśaya*—Carnivorous quadrupeds living in caves and hollows, e.g. the lion, tiger, wolf, jackal, etc.

the line, quoted by Mallinātha from the *Karṇodaya* under *Meghadūta* (i. 9, ed. Nandargikar, Bombay, 1894), it seems to have been a work on ornithology. From the quotations from the *Mṛgacarmīya*, found in his commentary on the *Raghuvamśa* (iv. 39) and the *Śiṣupālavadha* (V. 49), this work appears to have dealt with elephant-lore. The passages from the *Revattara*, quoted in the commentary on the *Śiṣupālavadha* (V. 60), appear to indicate that it was a work on *Aśva-śāstra*.

Of the authors, mentioned by Mallinātha, Cākṣuṣa, quoted from in the commentary on the *Raghuvamśa* (V. 50), appears to have written on elephant-lore.

### Elephant-lore

Richly dressed and marked with decorative designs on the forehead, the elephants formed attractive parts of royal processions. Sanskrit poems and dramas are replete with references to this lordly animal. That the use of this animal was known even in the remote past is attested by the *Ṛgveda*. The *Rāmāyaṇa* (i. 6. 24) mentions several species of elephants. The Superintendent of Elephants appears to have been recognised; in the *Arthaśāstra* (II. 31. 32), as an important dignitary under the king. Various matters relating to the elephant have been discussed in the *Bṛhatsaṃhitā* and the *Sūkra-nīti*. The poetical work, called *Yaśastilaka-campū*, by Somadeva, contains<sup>1</sup> some facts of elephant-lore. Distinct treatises, dealing with this subject, were written. Of them, the following two works only have been published hitherto :

- (i) *Hastyāyurveda*<sup>2</sup> of Pālakāpya,
- (ii) *Mātāṅga-līlā*<sup>3</sup> of Nīlakaṇṭha<sup>4</sup>.

As already stated, some of the DS. refer to mis-shaped (*vikṛta-rūpa*) species of fish like *Sarpaśirṣa* (serpent-headed),

1. Kāvya-mālā ed., I. p. 482.
2. Ed. Ānandāśrama Skt. Series, Poona, 1894.
3. Ed. G. Sastri, Trivandrum, 1910. Trs. into German by Zimmer, Berlin, 1929. Trs. into Eng. by F. Edgerton, New Haven, 1931.
4. Keith appears to be wrong in attributing the work to Nārāyaṇa (*Hist. of SKT. Lit.*, 1928, p. 465).

*Manuṣya-sīras* (having head like that of a human being). There is reference to those species which are carnivorous. Both the awkward shaped and the carnivorous species are prohibited as food.

The *Rājanighaṇṭu* (a dictionary of medical terms) and the *Bhāvaprakāśa* (a work on Āyurveda) attribute certain medicinal properties to fish.

If is in the *Arthaśāstra* of Kauṭilya that we get, for the first time, ample information regarding fisheries. Thus it throws light on pisciculture and the rôle played by fish in that remote age. In Book IV, Chapter 3, the King is advised to provide food for the people by, among other things, fishing on a large scale in times of famine. In connexion with measures to be adopted in besieging a hostile kingdom Book XIII, Chapter V, suggests the following method. A flaming stick, fixed on the body of a dried fish, should be caused to be carried by a monkey, a cow or a bird to the thatched roofs of the houses ; this will scare away the inmates. From this it can be inferred that, in those days, invading armies used to carry dried fish among their provisions. While dealing with custom duties (Book II, Chap. 22) one-sixth of the value of dried fish is, prescribed. This clearly points to trade in this commodity. In Book II, Chapter I, in connexion with the formation of a village, the King is asked to enforce his right of ownership over fishing in reservoirs of water.

The manure of small fish is prescribed for the growth of sprouts of seeds (Book II, Chap. 24). Of the several regulations to be enforced by the Superintendent of Slaughter Houses (Book II, Chap. 26) the following relate to fish :

- (i) heavy punishment to be inflicted on a person killing or cruelly treating the fish declared to be under State protection and those growing in sanctuaries (*abhayāranya*).
- (ii) punishable is the offence of killing or molesting those species which do not kill other animals.
- (iii) of the fish caught, the Superintendent shall realise one-tenth or more as toll.

- (iv) fish everywhere shall be given protection against molestation.
- (v) those in sanctuaries, which become injurious, shall be killed outside the protected forests.

In Book II, Chap. 27, provision is made for realising from fishermen one-sixth of their haul as the fee for their fishing licence. They are, however, exempted from the payment of fees for fording or otherwise crossing rivers at any time and any place. In Book XIV, Chap. 1, the poisoning of fish in the enemy's kingdom is stated as one of the secret means of injuring the enemy. It is interesting to note that this process of poisoning is scientific, because by it the fish will not die but carry the poison so that people eating it will die. At one place, it is stated that the smoke, produced by burning the powder of fish, along with that of some other substances, causes blindness.

From the foregoing account, it is clear that fish played a very prominent part in the social and political life of the people. The extreme familiarity with fish is also proved by its metaphorical use. *Mātsya-nyāya* has been referred to above. In Book II, Chap. 9, of the *Arthas'āstra* we find government servants, surreptitiously accepting bribes, are compared to fish drinking water below the surface without the knowledge of anybody. In Book I, Chap. 21, the king is asked, as a safety measure, to enter such water as is free from large fish. From Book III, Chap. IV, we learn that fishermen used to travel with their women.

The latter being well-known in Kerala, the editor thinks that the author was a native of that region.

From the *Hastyāyurveda*<sup>1</sup> we learn that Pālakāpya was a sage so named because he used to rear up elephants and belonged to *Kāpya-gotra*. We are informed that Pālakāpya narrated the science exhaustively to Romapāda, king of Aṅga, at the latter's request. The date of the work is not known.

Written in prose and verse, the work seems to be a compilation. At the end, it is called *Hastyāyurveda-saṃhitā*. The work is divided into four sections each of which is called

1. i. 1.155.

*Sthāna*. These are *Mahāroga-sthāna*, *Kṣudraroga-sthāna*, *Śalya-sthāna* and *Uttara-sthāna*. Each *Sthāna* is sub-divided into several *Adhyāyas*. In the first section, there is a discussion on the fatal diseases of elephants and their remedies. In its *Adhyāya*, called *Roga-vibhakti*, the diseases are divided into two classes, viz. *Ādhyātmika* (arising within the elephant's body) and *Āgantuka* (caused by an extraneous source, infectious). Of these diseases, 76 are *Vātaja* (caused by wind), 27 *Pittaja* (caused by bile) and 32 *Śleṣmaja* (caused by phlegm).

In the second section, many ordinary diseases and their treatment have been dealt with.

Elephant-surgery has been treated of in the third section. In this connexion, the following instruments have been mentioned :

*Vṛddhipatra*, *Kūṭa-patra*, *Maṇḍalāgra*, *Vrihi-mukha*, *Kuṭhāra-kṛti*, *Vatsa-danta*, *Utpala-patra*, *Śalākā*, *Sūci* and *Rampaka*.

The topics, dealt within the last section, are food and drink of elephants, flow of ichor, elephant-stall, description of various kinds of elephants, *nirājanā* of elephants, etc. In the thirtieth chapter, called *Pāṃśūdāna*, of this section, elephants have been divided into four classes—*āraṇya* (wild), *damyamāna* (under training), *dānta* (trained) and *purāṇa* (old).

The *Mātāṅga-līlā* is written in 263 verses divided into twelve chapters called *Paṭalas*. The contents of the chapters are briefly as follows :

- I—a legend on the origin of elephants, synonyms, with respective derivative meanings,<sup>1</sup> of the word 'hastin'.
- II—good and bad signs. Some of the good signs are high tusk and backbone, red tip of the trunk, tongue and lip, nails numbering 20, *Svastika* or circular marks on the body, gait like that of a lion or deer. Trumpeting caused by hunger, thirst or fear is ominous.
- III—evil signs, e.g. more or less than the usual number of limbs, curved tail, extremely emaciated body.
- IV—signs helping the ascertainment of longevity. The following signs indicate long life : Smooth tusk and nail, long ear and tail, auspicious mark.

1. E.g. *Nāga* (*na+aga*)—that which goes everywhere. *Gaja* (root *ji*)—that which defeats.



V—signs indicating age and different stages of life. Some stages of life and signs indicating them are as follows :

*Bāla*—from birth to the first year of life ; coppery colour, fondness for sucking, possession of undeveloped limbs.

*Puccuka*—second year of life ; exceedingly red tongue, lip ; too much fondness for sugar.

*Upasarpa*—third year ; mature nails, ears, etc., firm tusk.

*Barbara*—fourth year ; fond of grass but averse to milk.

The span of an elephant's life is said to be 120 years.

VI—measurement of the elephant's body. Its height is from nails to the neck and length from the eye to the tip of the tail. In this chapter, we find the measurement of elephants of different classes and periods of life.

VII—valuation of elephants. If the left tusk is higher than the right, it causes decrease of value. Other defects also cause depreciation of value.

VIII—different types of the nature of elephants and their external signs. According to their nature, elephants are divided into several classes, e.g. *Deva*, *Dānava*, *Gandharva*, etc. Elephants possessing good look and sweet smell belong to the *Deva* class. Those of the *Dānava* class are fond of fight, malodorous and killers of other animals. The *Gandharva* type of elephants is fond of music, their gait is charming and tusks and temples are very beautiful. Elephants have also been divided into the four well-known castes. Those which are peace-loving, sweet-smelling and fond of bath are *Brāhmaṇa*. The *Kṣatriya* is undaunted in fight. Elephants of the *Vaiśya* class are painstaking, fond of fish and their anger is easily pacified. *Sūdra* elephants are fond of smelling, irritable, timid and eat the remnants of food. Elephants of the *Deva*, *Kṣatriya*, *Brāhmaṇa* and *Gandharva* types are *Rājasika* ; all other types are *Tāmasika*. Elephants may be of the following colours—tawny, yellow, black and white. Of these, only black ones are found on earth.

IX—flow of ichor due to excess of joy or excitement. When ichor flows, the elephant's cheeks become moist, it trumpets like a cloud and wants to break away from the place where it is tied. In such a condition, it should be given pills made of the barks of the trees called *Sahā* (*Aloe perfoliata*), *Madhūka* (*Bassia latifolia* or *Tonesia asoka*), *Śālmali* (*Bombak heptaphyllum* or *Salmalia malabarica*) mixed with honey and milk.

X—Five methods of capturing wild elephants. These are briefly as follows :

About two miles of land should be surrounded by strong trees and sugar-canes and other tempting articles are to be placed within the enclosure. The land will be entrenched by a moat difficult to cross. On one side of the enclosure, there will be a door with a very strong door-leaf raised. The elephants will be driven into the enclosure by scaring them with beats of drums, etc. As soon as the herd enters into the enclosures, the door-leaf will be lowered and closed. After this, the people, engaged for this purpose, will enter into the enclosed space with tame elephants, ropes, spears, goads and chains. Cautiously and skilfully they will put the chains on the legs of the wild elephants.

Another method is this. Drivers of five or six tame female elephants taking ropes, etc., with them will hide themselves under leather with which the animals will be covered. In this way, they will take the elephants, and by tricks each of them will tie up one wild elephant with ropes. The female elephants, bathed in cold water mixed with the barks of certain trees, e.g. *Kāleyaka* (*Curcuma xanthorrhiza*), *Māleya*, etc., become fit for enticing male ones.

A third method of capturing wild elephants is as follows. By beat of drums and other instruments wild elephants will be scared. While they start running, they will be chased by people. When the baby

elephants, through exhaustion, will be almost lame, they will be skilfully enchained.

A fourth device is this. Nooses of ropes will be laid on earth and covered with banana plants, sugar-canes and such leaves of trees as are liked by elephants. People will remain in hiding nearby. When the elephants, attracted by banana plants, etc., will start eating them the noose-ropes will be drawn and the animals made to fall down.

The last means of capturing them is this. A pit, four cubits deep, two cubits wide and five cubits long, has to be dug. On it will be kept food for elephants. Baby elephants, attracted by food, will come there and fall into the pits. Thus they may be captured.

The last two methods, particularly the last one, have been condemned for the reason that the elephants may be injured or even killed.

XI—maintenance and food of elephants. The newly captured elephants are to be bathed in cold water daily in the morning and evening. Daily supervision of the place for the elephant's lying down, exercise and medicine, etc., is necessary. Lotus-stalk, banana plant, grass, fig tree, sugar-cane, leaves and fruits of the banyan tree, bamboo-leaves, cooked and uncooked rice—these are the favourite and beneficial food of elephants. Application of ghee is efficacious for their eyes and tusks. Intake of adequate salt is an immediate cure for their worms and loss of appetite. Rheumatism and cough of elephants are counteracted by oil mixed with grass, *Vaca* (*Acorus colamus*?) garlic, salt and ginger, etc. Different seasons. The treatment of some elephant-diseases like fever is similar to that of the same diseases of human beings.

XII—qualifications and disqualifications of the driver and superintendent. The latter will be like the king, intelligent, pious and endowed with other qualities. The driver must be an adept in climbing up and down the elephants and in the treatment of their diseases.

Nilakaṇṭha : Mātāṅgalīlā, ed. G. Sastri, Trivandrum, 1910. Translated into English by Edgerton, Yale, 1931 ; into German by Zimmer, Berlin, 1929. (Acc. to Keith, the author of this work is Nārāyaṇa. See A. B. Keith, *History of Sanskrit Literature*, 1930, p. 465).

Pālakāpya : *Hastyāyurveda*, Poona, 1894. (The anonymous Ms. No. 12295, of unknown authorship, preserved in Sarasvatī Mahal Library, Tanjore, deals with this subject).

## EQUESTRIAN SCIENCE

That the Indians knew the use of this animal in hoary antiquity is attested by the *Ṛgveda*. The *Aśvamedha* sacrifice was a great event in the political life of India. The horse was used for many purposes, e.g., drawing the plough, carts and chariots, carrying mails and soldiers in battles. It was also used as a mount in hunting. Cavalry formed an important part of the military set-up. Caparisoned horses added to the grandeur of processions. In the *Arthaśāstra*, we find that the superintendent of Horses (*Aśvādhyakṣa*) was a notable dignitary in the royal service. It is no wonder, therefore, that treatises were written exclusively dealing with the horses. Such treatises are broadly of two classes. One class of works discusses the breed, the good and bad signs of horses. In those of the other class, various diseases of horses and their treatment have been dealt with.

The *Aśva-śāstra*<sup>1</sup> is the only work published so far, belonging to the former class of works. The manuscript, on which the edition is based, contains pictures of twenty-one horses of different types. It is attributed to Nakula who appears, from the fourth and fifth verses, to be identical with Nakula, one of the five Pāṇḍava brothers of the *Mahābhārata*. The date of

1. Ed. S. Gopalan, Sarasvatī Mahal Library, Tanjore, 1952. In the preface, the editor observes that there are many Mss. in the library dealing with horse-lore.

the work is unknown. That it is a compilation, and not an original composition, is mentioned in verse five of the work. It seems that the author, with a view to imparting a halo of authoritativeness and antiquity, associated the work with the name of the well-known Pāṇḍava whom legend makes a physician of horses.

The topics, dealt within the work, are briefly as follows :

*Vāji-praśaṃsādhya*—after salutations to Gaṇeśa and other deities, the authorities on horse-lore are mentioned ; the authorities are the sun, the moon, sage Śālihotra, Suśruta, Garga, etc. In course of the eulogy of horses, it has been observed that it is indispensable in battle ; in fact, the world can be brought under control by means of horses (*asvair-hastagatā pṛthivī*). The horse is fearless, loyal to its master and fast-running. Capable of enduring hunger and thirst, the horse can be used in all seasons.

*Raivata-stotra*—Raivata is said to have been born of the union of the sun and *Chāyā*. It is stated that no harm is caused to the horses of one who remembers, in the morning, the 28 names like Raivata, Pārthiva, etc.

*Praśnādhya*—It has been said that, in times of yore, horses, endowed with wings, used to fly with Gandharvas. At Indra's request, Śālihotra clipped their wings. Thus they became useful to mankind.

*Pradeśādhya*,

*Aṅgalakṣaṇa-prakaraṇādhya*,

*Aśvalakṣaṇo-podghātādhya*—before selection of horses, their appearance, formation of body and signs are to be examined. Those with inauspicious signs should be rejected. Particularly condemned are those having inauspicious signs in the lips, face, nose, etc. The following are some of the good signs :

red colour, soft and hairless lips, delicate sides of the face, stout neck, etc.

The longevity of a horse is 32 years ; this period is

divided into ten stages the duration of each of which is three years, two months and twelve days.

The body of the horse is divided into the following ten parts :

from the nose to the forehead, head to neck, neck-mane-shoulder, chest-hump-sides, fore-part of the body, side of the heart and flanks, belly-spine, private parts, thigh-knee-hip, shanks with hoofs.

*Āvartādhya*—the hairy marks, found on the body of some horses, are called *āvarta*. These may look like the moon, a triangle, arrow, etc. Marks of other forms also are sometimes found. These are oyster, knotty formation, bud, tongue, *śatapādi* (?), *pādukā*, *pādukārdha*, lotus, bow, fish, etc. The *āvartas* can be classified as *Dhruva*, *Nindya*, *Śubha* and *Aśubha*. If the *Śubha* and *Aśubha* are found together, the latter should be burnt off with heated gold ; then the evil effect will be removed.

*Miśrita-lakṣaṇā-dhyāya*—horses of the best kind are possessed of the following characteristics : white all over, whiteness of particular spots, e.g. hoof, face, well-built body, graceful gait. Horses of some mixed colours are best, e.g. red or dark colour of the body with white ears, hoofs, faces and legs, etc. Certain mixed colours are bad, e.g. dark hoofs and white legs.

*Puṇḍra-lakṣaṇā-dhyāya*—*puṇḍra* is the designation of a white mark below the ear but above the nose. *Puṇḍras* of the following shapes indicate the future acquisition of wealth and victory on the part of the owner of the horse :

lotus-petal, pitcher, plough, flag, goad or hook (*aṅkuśa*), Bel tree, conch-shell, umbrella, *Svastika* mark, etc.

Black marks and marks of the shape of chains forebode evil. Similar is the case with *puṇḍras* on particular places, e.g. lips, left side of the face. A mark on the forehead is called *lalāma*. *Lalāmas* of the shape of the moon, crescent, the sun, stars, etc.,

are auspicious. *Lalāmas* looking like *paṭaha* (drum) or *Kāka-pada* (crow's foot) are inauspicious. Marks on head, ear, hump, etc., of a single-coloured horse are also called *lalāma*. Such *lalāmas*, if white, are auspicious. Marks of varying colours on different limbs of such a horse are regarded as inauspicious.

*Puṣpa-lakṣaṇa*—certain marks appearing on the body of a horse and disappearing after sometime are known as *Puṣpa*. These marks on particular parts of the body are auspicious while, on others, they are inauspicious.

*Heṣita-śubha-lakṣaṇa*—the neigh of a horse at the sight of a Brāhmaṇa, a jar filled with water, etc., is auspicious. The neigh of horses, which are too young, too old, tired, afflicted with hunger or thirst, is of no consequence. Inauspicious is the grunt of a hog, howl of a jackal or the bray of an ass.

*Gandha-lakṣaṇa*—auspicious are the horses the smell of whose body is like that of lotus, sandal, etc. Inauspicious are those which smell like a camel, ass or tortoise, etc.

*Chāyā-lakṣaṇa*—as the cloud covers the sun, so reflection covers the horse's body. The reflections are of five kinds, viz.

- (i) *Prthvījā*—of different pleasant colours.
- (ii) *Vāruṇī*—this is of water and looks like cloud.
- (iii) *Saurī*—like the rising sun.
- (iv) *Vāyavyā*—arising from wind.
- (v) *Nābhasī*—arising from the sky.

These reflections are visible when the horse drinks water, eats grass or falls asleep.

*Gati-lakṣaṇa*—the gait of the horse, in which the strides are uniform, and which is pleasing to the eye and mind, is auspicious. The horse, whose gait is like that of a peacock, bull or tiger, causes good to the master. The horse, which jumps or kicks while going, forebodes evil.

*Sattva-lakṣaṇa*—the nature of horses may be *Sāttvika*, *Rājasa* or *Tāmasa* each of which has the following sub-divisions.

## Sāttvika

- (i) *Brāhma*—devoid of passion and anger and endowed with good memory.
- (ii) *Ārṣa*—free from jealousy, disease and delusion.
- (iii) *Aindra*—spirited.
- (iv) *Yāmya*—free from illusion.
- (v) *Kauvera*—possessed of good memory, passionate and having manifest joy and anger.
- (vi) *Vāruṇa*—playful and heroic.
- (vii) *Gāndharva*—fond of music.

## Rājasa

- (i) *Āsura*—haughty and irate.
- (ii) *Rākṣasa*—fond of sleep and gluttonous.
- (iii) *Paiśāca*—timid and gluttonous.
- (iv) *Sārpa*—irascible.
- (v) *Paitra*—wicked and timid.
- (vi) *Śākuna*—gluttonous and frowning.

## Tāmasa

- (i) *Pāśava*—timid, lazy and dull-witted.
- (ii) *Mātsya*—gluttonous, timid and fond of water.
- (iii) *Vairudha*—lazy and sleepy like a creeper.

*Mahādoṣādhyāya*—the following signs of a horse are inauspicious : dark colour, short, broken or unequal teeth, possessing more or less limbs than usual, etc. The horse that has carried a corpse or smells like burnt leather is to be rejected.

*Tālu-raṅgādhyāya*—the *tālu* (palate) may be of different colours of which the red one is auspicious ; all other colours are inauspicious.

*Kula-lakṣaṇādhyāya*—54 species of horses are mentioned here.

Some of them are :

Araṭṭaka, Āvantya, Dārada, Dākṣiṇeya, Gāndhāra, Kāmboja, Kāśmīra, Kālinga, Mālava, Mādhura, Māgadha, Pārvaṭiya, Saindhava, Sauvīra Saurāṣṭra, Vanāyuja. Some of the species are said to have sub-species.

*Vayojñāna*—from certain internal and external signs the age



of a horse can be determined. A few examples may be given. Age can be ascertained from the colour and shape of the teeth. For instance, slightly grown teeth indicate the first month of age. The complete set of teeth, if fully developed, indicates seven months. When all the teeth are white, they indicate that the age is within one year. A horse, devoid of all the teeth, is to be taken as thirty-two years old.

*Varṇa-lakṣaṇa*—the colour of a horse may be white, red, dark, green or variegated. The following are the designations of horses depending on the colour of their limbs and hairs: Sāra, Karka, Kukkuṭa, Krauñca-patra, Sindhu-vāraka, Añjana-keśaka, Śukla-romaka and Śvetākeśika.

Horses of different colours are associated with the names of certain deities. For example, the moon's horse is white, Indra's horse is green and so on.

*Rājavāhādhyāya*—The horses, suitable for kings are white, dark, red or variegated. They will have well-built body, graceful gait, auspicious *āvartas* and *lalāmas*. Horses suitable for various purposes are classed as follows :

*Paramāśva*—suited to gods. These are prohibited as mounts and are to be worshipped.

*Abhiṣecanika*—the king should ride it in coronation.

*Kṣatriyāśva* - suitable for Kṣatriyas.

*Sānnāhya*—useful in war.

*Aupavāhya*—fit for riding.

Each of these classes has certain characteristics.

*Āyur-lakṣaṇādhyāya*—the longevity of horses can be gauged from certain signs. For instance, short ears, sweet voice, broad chest, etc., indicate long life. A horse, with the forepart of its body stooping, does not become long-lived.

*Utpāta-prakaraṇādhyāya*—certain signs on the body of a horse and its different activities are inauspicious. For example, its striking the earth with its left foot shows that the journey will not be beneficial. If the horse's

body is hot like fire, it forebodes drought for one year.

*Vāhana-śikṣādhyāya*—in matters relating to their training, horses are divided into the following classes :

Brāhmaṇa—timid and greedy.

Kṣatriya—spirited and courageous.

Vaiśya—wild and wicked.

Śūdra—rude, timid and cruel.

In accordance with the nature of horses, they should be trained by *Sāma* (conciliation), *Dāna* (gift) and *Daṇḍa* (punishment). The place of training shall be free from stones, soft and dry. A man, who is corpulent or irascible or beats the horse for nothing, is unfit for training a horse. The trainer should be patient, cautious and skilled in riding ; he must have knowledge about the nature and mind of the horse. For the faults of the horse, it should be beaten at certain stated parts of the body. For example, for too much neighing it should be beaten on the knee ; for straying away it should be hit on the face. Beating at improper places results in bad training.

*Dhārādhyāya*—the gait (*dhārā* or *gati*) of a horse may be as follows :

- (i) *Vikrama*—ordinary gait.
- (ii) *Pulaka* (?)
- (iii) *Pūrṇakanṭhī*—moving with the face upright.
- (iv) *Tvaritā*—moving fast of its own accord.
- (v) *Nirālambā*—moving after being beaten.

*Āroha-vidhānādhyāya*—the rider shall sit steadily, and must not swing or look at the ground. He should slightly spur the horse. While mounting, he should use the right foot first. *Tithis* and *Nakṣatras*, auspicious for riding, are mentioned and the author states some incantations to be used by the rider. At the end of the work, the following information has been incorporated. It has been obtained from Malladeva's *Sārasindhu* or *Śālihotra Vaiśampāyanīya*, a manuscript preserved in Tanjore Sarasvati Mahal Library.

Horses of the following descriptions are to be rejected : blind, deaf, dumb, dull, impotent, *Kumārikā*, i.e. a mare which

refuses to associate with a male horse. There are certain indications from which such horses can be known. For example, the horse which gazes at the sky and jumps on even land shall be taken as blind. A horse, that looks at another direction when called, is deaf. Incidentally, the measurement of the limbs of the best and worst horses is also stated.

Coming to the psychology of horses, we are told that a horse is scared at the sight of an iron rod. Horses are delighted at the time of eating, coronation, at the sound of bells (*ghaṇṭā*) and when they get good riders. They feel disgusted if the riders beat them for nothing or hang on their necks.

Then we get a list of the appurtenances of the horses. These are as follows :

*Kaśā* (whip)—it must be soft, round and covered with goat's skin.

*Pāna-nalikā* (drinking vessel)—made of bamboo, it is of the shape of a horse-ear. Water and milk are given in it for drinking.

*Akṣimālā*—leather-cover for the horse's eyes to prevent mosquitos and gnats.

*Khuratra* (for covering the sides of hoofs)—made of iron. This prevents the erosion of hoofs, and appears to correspond to the modern horse-shoe.

*Khalīna* (bit)—it must be soft and made of iron or ivory. Its measurement will be in accordance with the side of the horse's mouth.

To the second class of works, referred to above, belongs the *Aśva-cikitsā*<sup>1</sup> attributed to Nakula. It is in eighteen chapters. The following topics appear to be dealt within it. Knowledge about the teeth of horses, measurement of limbs, speed, method of riding, castes of horses, their colour, classification, maintenance in different seasons, good and bad signs, diseases and remedies, rules about stables, etc.

Another work of this class is called *Aśva-vaidyaka*<sup>2</sup> written by Jayadattasūri, son of Vijayadatta. In the chapter-colophons,

1. Ed. Bibliotheca Indica, Calcutta, 1887.

2. Ed. Bibliotheca Indica, Calcutta, 1887.

the author is styled *Mahāsāmanta*. Its provenance is unknown. From certain internal evidences, the author is supposed to have flourished later than the thirteenth or even the fifteenth century AD.

It is written in 68 chapters. From certain statements in the work, it appears to be a compilation. In addition to the topics, mentioned above, it deals with remedies against the barrenness of horses and their suitable fodder. The horses of the *Tājika* class are regarded as the best. Of the diseases of horses, mentioned in it, some are *Vraṇa* (scar), *Śūla* (pain), *Kuṣṭha* (leprosy), *Śoṭha* (dropsy), *Arśa* (piles) and *Unmāda* (insanity). Of the various herbs, mentioned as curing the diseases of horses, the following are important and well-known :

- Aguru—*Aquilaria agallocha*.
- Ahiphena—Opium.
- Āmalaka—*Phyllanthus emblica*.
- Apāmārga—*Achyranthes aspera*.
- Arjuna—*Pentapetia arguta* or *Terminalia arjuna*.
- Atasi—*Linum usitatissimum*.
- Dhattūra—*Datura fastuosa*.
- Eranda—*Ricinus communis*.
- Guggulu—*Bursera racemosa*.
- Haritaki—*Terminalia chebula*.
- Hingu—*Ferula assafoetida*.
- Kaṇṭakāri—*Solanum jacquintii*.
- Karavīra—*Nerium odoratum*.
- Kulattha—*Dolichos uniflorus*.
- Laṣuṇa—*Allium sativum*.
- Nimba—*Azadirachta indica*.
- Paṭola—*Trichosanthes dioica*.
- Pippali—*Piper longum*.
- Raṣaṇa—Same as *Laṣuṇa* above.
- Saptapatri—*Alstonia scholaris*.
- Tulasī—*Ocimum sanctum*.
- Udumbara—*Ficus glomerata*.

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1. E.g. i. 3, vii. 1.

It is interesting to note that a work, entitled *Aśvāyurveda*, is ascribed to Vāgbhaṭa. It is still unpublished.<sup>1</sup>

## ORNITHOLOGY

The ornithological knowledge of the Indians of old is borne out by the single work, entitled *Śyainika-śāstra*. Birds of various kinds are, however, mentioned in several works. The work is attributed to Rudradeva, or, according to some Mss., Candradeva or Rudracandradeva. Of him we know nothing beyond the fact that he was king of Kūrmācala or Kumaon.

The date of the work is unknown. The occurrence of some Turkish words in it does not necessarily indicate that it was written in a period later than the invasion of India by the Turks; because, long before this invasion, Indians had commercial contacts with the Turks. It has been ingeniously suggested by H. P. Sastri that the work appears to have originated at least three hundred years earlier. This is because, although the work mentions various arms and ammunitions in connexion with hunting, gun and gunpowder are conspicuous by their absence. Sastri further holds that it could not have been composed in the pre-Muslim period; because, the author wrote a Smṛti digest called *Traīvarṇika-dharma-nirṇaya* and Smṛti digests were composed in the wake of Muslim occupation. This view, however, is not sound for the simple reason that the digest-makers like Bhavadeva, Aniruddha and Halāyudha wrote their works in the pre-Muslim period. Sastri points out that the author of the work quotes Kullūkabhāṭṭa's observations. Kullūka is believed to have flourished about the middle of the thirteenth century which, therefore, is the upper limit of Rudradeva's date.

It is interesting to note that, although the title indicates the contents to be about *Śyena*<sup>2</sup> (falcon or hawk) only, yet

1. MS. No. 581 of 1899-1915 belonging to Bhandarkar Oriental Research Institute, Poona. Date of copy-1651 AD. See P. K. Gode, Instructions regarding...horse stables, *Madras University Journal*.
2. *Śyainika* is derived from *Śyena*.

some other matters are dealt within it. The work consists of seven chapters which are called respectively :

- |   |  |
|---|--|
| I—Karmānusañjana  | —discussion on <i>Vyasanas</i><br>(vices). |
| II—Vyasana-heyatā-nirūpaṇa  |  |
| III—Mṛgayā-vivecana—praise of hunting and description of eight kinds of hunting.        |  |
| IV—Śyenānāṃ vivecanam—kinds of hawks, their description and maintenance.                |  |
| V—Cikitsādhikāra—various maladies of hawks and their treatment.                         |  |
| VI—Śyenapāte-tikartavyatā—description of hawk-fight and the pleasure derived from it.   |  |
| VII—Mṛgayānantare-tikartavyatā—description of the ways of king's rest after hawk-fight. |  |

The contents of the work are briefly as follows. The eight so-called vices, arising out of wrath, and the ten, originating from passion, are not vices as such ; unfettered addiction to them is vicious<sup>1</sup>. The author holds that one taking to them within reasonable limits derives pleasure whereas total abstinence from them stands in the way of the fulfilment of the purpose of life in many respects. For example, if a man completely abjures the company of women then how can he get a son ? If killing of animals is shunned, then meat even for sacrificial purposes cannot be obtained. Day-sleep, though condemned, is conducive to health on the part of one suffering from indigestion.

According to the author, hunting is of many kinds of which he describes the following eight :

- (i) *Āśvīnā*—hunting from horse-back.
- (ii) *Sajālā*—hunting with noose or snare.
- (iii) *Kālyā*—hunting with various tricks.
- (iv) *Yāvaśī*<sup>2</sup>—hunting animals after ascertaining their movement by observing the shaking, etc., of crops in the field.

1. For the enumeration of the vices, see *Manu-smṛti*, vii, 47, 48. *Mṛgayā* (hunting) is included in the latter group.

2. It appears to be derived from *yavasa* (fodder) so that *yāvaśī* seems to be proper spelling.

- (v) *Sāpekṣā*—hurling weapons at the target after waiting.
- (vi) *Padaprekṣā*—hunting by following the footprints.
- (vii) *Śvagaṇikā*—hunting by setting dogs on the target.
- (viii) *Śyenapātā*—hunting with hawks.

The best season for *Āśvinā* type is the period between the middle of winter and the middle of *Jyaiṣṭha*. Places devoid of mud, stones, trees and holes are best suited for it. As a result of this kind of hunting, the body becomes light, strong and devoid of fat; it engenders the capacity for withstanding hunger, thirst, cold and heat. By this one can master the art of bagging moving objects. This form of hunting leads to the acquisition of both *dharma* and *artha*. *Dharma* is acquired by killing ferocious animals and those destroying crops, by protecting forests serving various useful purposes, by removing thieves, etc., and by getting opportunities of cultivating friendship with the people living in forests. Hunting leads to the acquisition of wealth by affording opportunities of obtaining wild elephants, rhinoceroses, costly horns, and leathers, musks, etc. By such hunting one can get such flesh of animals as excites sexual passion and helps in sexual gratification. Thus, this type of hunting leads to the attainment of the three, viz., *dharma*, *artha* and *kāma*, out of the four ends of human life.

By means of *Sajālā mṛgayā* one can collect fish, conch-shells, oysters, etc. *Niṣādas* and other low-class people take to this form of hunting. It is suitable also for kings as elephants can be caught by this means. Capture of deer with deer and birds with birds also come within the purview of this type.

*Kālyā mṛgayā* is of four kinds, viz.

- (i) *Bahu-karṇikā*—in it two or three persons together turn towards the wind, shout at the top of their voice and pierce deer with three-pronged spears.
- (ii) *Mūla-lagnikā*—in this form, many people, hidden behind trees, advance gradually and kill animals from behind.

(iii) *Mahā-kālyā*—in this type, many people surrounding a forest gradually advance, block the ways of escape and kill animals with swords or other weapons.

(iv) *Gaja-kālyā*—in summer, elephants are captured when they fall into pools which are almost dry.

In the *Yāvasī* type, animals hiding in the fields of wheat, etc., are killed after ascertaining their movements from the shaking of the plants.

In the *Sāpekṣā* type, the archers lie in wait, and as the animals come near by they pierce them with poisonous shafts. This form of hunting is suitable at places abounding in *Bibhītaka* trees (*Beleric myrobalan*) and crops and also in the vicinity of tanks. Ferocious animals like lion can be easily killed in this manner by keeping in front the carcasses of cows.

*Padaprekṣā mṛgayā* is twofold. In one type, the hunter traces the target by following the footprints of the dog set against it and then kills it. In the other form, the archer himself follows the footmarks of the animal to be killed. This form is suitable in a sandy or moist spot.

In the *Śvagaṇikā* type, some dogs are set against hares and the like. When those animals are engaged in fighting with the dogs, the archer discharges arrows at the target. It requires a deft hand, because the arrow will hit the target only and not the dogs. *Rajjvāmoka* is a variety of this type ; in this, a deer is captured by skilfully spreading ropes.

In the last-mentioned form, trained hawks, let loose, fall upon other birds. The hawks can be released in two ways :

(i) *Hastāmoka*—the rope, tying the leg of the hawk, is held in the finger, and the bird is thrown towards the target.

(ii) *Muṣṭimoka*—the hawk is placed on the palm, its feathers being wrapped in a piece of cloth. Then it is thrown off. One has to see that the piece of cloth does not obstruct its flight.



The method of training hawks is amusing. The trainer's primary duty is to create the bird's confidence in himself. With this end in view, as soon as he gets a hawk he will shut its eyes in such a way that it cannot see his face for five days. Care must be taken to ensure that it cannot even hear his voice within this period. After the lapse of this period, its eyes are to be opened and washed with cold water. Thus, its confidence is to be gradually engendered. He will himself give food and drink to it and fondle it. Punishment is also ordained for those hawks which cannot be easily tamed.

Hawks are broadly of two kinds, viz. *Kṣṇākṣa* (dark-eyed) and *Pāṭalākṣa* (red-eyed). To the first class belong those called *Kuhī*, *Śasāda* (Hare-hawk), *Caraka* (Suker-falcon), *Vaharī* (Peregrine), *Lagar* (Lugger falcon), *Pakṣa-kalikā* and *Turumatī* (Merlin). Those belonging to the second class are called *Vāja*, *Vāsa*, *Vesara*, *Sicāna*, *Jura*, *Ceṭa*, *Dhūti*, *Ṭuna*. The author holds that, in both the classes, the females have greater courage and a more graceful gait.

According to the author, though *Vāja* is a generic name of birds, yet, by usage, it denotes hawk. *Vājas* are of five kinds :

- (i) *Balākā*—having a frail body and white and dark feathers on the chest and the thigh.
- (ii) *Cakrāṅga*—looking like the *Cakravāka* bird.
- (iii) *Kālaka*—long and dark like the *Kaṅka* (heron).
- (iv) *Haṃsa-vāja*—having a snow-white body.
- (v) *Mahā-rāvaṇa*—in its tail and feathers there are signs like the leaves of the *Aśvattha* or *Pippala* tree. It is looked upon as the king of *Vājas*. It is called *Rāvaṇa* because, at its approach, other birds are terrified and cry loudly.

*Vāsas* are of four types :

- (i) *Auraṅgaṇa*—it is of various kinds in accordance with strength, courage and colour.
- (ii) Those having frail forms and moving fast.
- (iii) *Pratiṣṭhāna*—having thick feathers. Its courage and speed of movement are inferior.

(iv) *Śikāra*—exceedingly courageous and fast-moving.

*Vesaras* are of three kinds :

(i) *Māṇika*—corpulent and possessed of inferior qualities.

(ii) *Cūlikāṅka*—possessed of medium qualities.

(iii) *Vāsapratīma*—possessed of best qualities, its courage and tail are like those of the *Vāsa* mentioned above.

Of the above birds, those having heads like serpent-hoods, long necks, widespread wings and broad chests are the best. Their body looks like the *Svastika* sign.

Varying quantities of food are prescribed for different classes of hawks. Fresh flesh weighing twenty-five *ṭaṅkas*<sup>1</sup> is to be given each to *Kuhi*, *Caraka*, *Vāja*, *Vaharī* and *Śaśāda*. Their males are to be given five *ṭaṅkas* less. Fifteen, thirteen and eleven *ṭaṅkas* respectively are prescribed for *Pakṣakalikā*, *Vāsa*, *Vesara* and *Cūlikāṅka*. The quantity of food for the *Sicāna* will depend on its capacity. Nine *ṭaṅkas* are fixed for *Turumatī*. To the *Ceṭa*, *Ṭuna* and *Dhūtikā* are to be given respectively eight, seven and six *ṭaṅkas*.

The maintenance of a hawk is not an easy job. After tying it up, it should be placed in a white-washed room atop the palace. That place must be kept cool by spraying water and occasionally by means of fans. It is to be enclosed by a net so that flies cannot get in. The hawk may be kept in a shaded and well-protected spot in the garden or in a cellar free from mosquitoes, etc. There also water is to be sprayed. The cellar should be surrounded by green sprouts of barley and perfumed. Not more than two or three hawks should be kept together.

Before the hawk a pot of water should be kept for its bath.

Treatment is prescribed for various diseases of hawks. Pulverised *Methi* (fenugreek), mixed with buffalo's butter, is to be administered to a hawk vomiting out its food. Only pulverised *Vahni*<sup>2</sup> or *Vahni*-powder, mixed with the juice of

1. 1 *ṭaṅka* = 4 *māṣas*.

2. The meaning is not clear. A species of plants appears to be so called. H. P. Sastri translates it as marking-nut.

hemp, as well as tepid water, is the medicine for indigestion. As an antidote for emaciation is prescribed a mixture of flesh and butter obtained from *Strī-stanya*<sup>1</sup> or cow's milk. Cloves or flesh, mixed with human wine, are to be administered for curing loss of appetite.

In the rainy season, hawks shed old feathers and grow new ones. If this is delayed, it should be given the flesh of *Śaraṭa*.<sup>2</sup> If the hawk's feathers start being worm-eaten, then the remedy is equal quantities of *Viḍaṅga* (*Embelia ribes*), *Vahni* and *Kastūrī* (musk).

The general name of the breathing diseases of hawks is *Śākhā*. It is of four kinds :

*Abhigāta-samutthā*, *Ślesmajā*, *Pittajā*, *Kṣaiṇyajā* (consumption). The last-mentioned disease is also called *Śoṣitā*, and is the most dangerous. Medicines are prescribed as curing all these forms of the disease. The antidotes of *Śoṣitā* are of various kinds :

Flesh of *Kalaviṅka*<sup>3</sup> soaked in human blood,  
fresh flesh of *Caṭaka*,<sup>4</sup> boar's flesh or  
bird-flesh mixed with cow's butter.

Occasionally a mixture of camphor and water is also prescribed.

Sometimes, white spots are visible inside the eyes of the hawk owing to heat, smoke or injury. The medicine in such a case is the powder of the roots of *Cāṅgerī*.<sup>5</sup> An alternative is pills made of equal quantities of *Haridrā*, *Nimba-patra*, *Marica*, *Haritakī*, *Pippalī* and *Mustā* (*Cyperus rotundus*) and *Viḍaṅga*; the pills are to be soaked in the urine of she-goats.

At times, due to fault of food and drink, inflammation is found in the mouth of the hawk; this happens owing to

1. Goat's milk, acc. to H. P. Sastri. From the commentary it seems that it may denote also the milk of a woman.
2. Same as *Kṛkalāsa*.
3. Sparrow or Indian cuckoo.
4. *Caṭaka* is not *Śyāmā*, as some think, but pied crested cuckoo (*clamator jacobinus*).
5. *Oxalis monadelphā*.

phlegm or bile. The remedy against swelling, caused by bile, is the eating of flesh with the pulverised bark of milk-exuding trees mixed with sesamum oil. The oil may also be used as an ointment. Other medicines are prescribed for curing the inflammation caused by other factors.

Boils or swellings are occasionally found on the legs of the hawk. This disease is called *Gardabhī*. If prolonged, it is called *Cāndī*. The remedy against the former is the daily application of the juice of the *Pippala* and the *Udumbara* tree over the affected spot; this should be continued for a week. Application of *Viṭ* (?) is an alternative measure. For curing *Cāndī*, at first a leech is to be placed on the affected spot. Then turmeric, mixed with butter and rocksalt, are to be applied over the sore, and it is to be bandaged with a piece of cloth. After every three days, the old medicine and bandage are to be replaced by new ones. Treatment for twelve days cures *Cāndī*.

Loss of strength and change of colour are sometimes visible in a hawk which is wounded. The medicine in such a case is a mixture of equal quantities of two kinds of *Haridrā*, *Tutthaka* (Blue Vitriol), *Bhārgī* (*Sithonanthus indica*), *Madana* (*Vangueria spinosa*), milk of *Arka* (*Calotropis gigantea*) and ghee.

Hawks suffer from worms by eating stale flesh or flesh that is difficult to assimilate. The worms are destroyed if a mixture of two-thirds *Viḍaṅga* and one-third *Kastūrī* is administered.

For want of bath, small insects grow on the body of the hawk. The remedy in such a case is the dusting of the powder of *Māgadhi* (long pepper). An alternative measure is the ointment of the pulverised bark of the root of Bel tree mixed with cow's urine.

As stated above, in the last two chapters of the work are described hawk-fight, the pleasure derived from it and the means of king's relaxation after witnessing the fight.

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Varana—that which prevents hostile kings.

Sindhura—(Sindhu & ram) that which is delighted in a river.



# BEASTS

## Airāvata (Airāvaṇa)

Name of Indra's elephant.

*Elephas maximus* Indian elephant.

Ādi vi. 26b.

Ayo xii. 33b.

Ara xxxvii. 8b.

Sun ii. 29a, xii. 31a, etc.

Yud xxviii. 17b, xI ix. 5b.

Utt xxxi. 5a, xxxviii. 95a, 96a.

## Aja

Goat. *Capra hircus*. (The wild goat)

AV vi. 71. 1, ix. 5. 1

S. B. 12. 7. 2. 7.

G VII. 15, XII. 22, XVII. 21.

B I. 12. 4, II. 3. 9, 6. 34.

Vas XIV. 35, XXVIII. 9.

Pan IV. 1. 4, 2. 39.

Ādi xvii. (4a)

Ayo C. 63a, 67a.

Sun xviii. 32b.

M. S. VIII. 235, XI. 136.

YS II. 10. 159

III. 5. 271.

VP 9.43, 46; 59.16; 72.46; 99.406

MP 145.17

It is mentioned as good for sacrificial purposes.

xxviii. 23a, xxx. 14b.

xxxiv. 15b. 1xxii. 20.

XCvi. 5a, 24b.

C iv. 6a. C viii. 24a., CX 2b, 3a.

Ara vi. 6a. XXV. 11b, 21a.

xxxix. 5a. XI. 38a.

XLiv. 13b, 33a. I iv. 11a

lix. 24a.

Yud CX. 49a.

Anaḍuha (Anaḍvāha)

Bull. *Bos indicus*

G VII. 15; XIII. 29; XVII.

28; XXII. 23. XXII. 23.

B I. 19. 5, 6.

Vas VI. 21, XIV. 45, 46.

Ayo Ixxvi. 30b.

MS XI. 136.

MP 109.23

Anekapa (Same as Hastin).

R V. 47.

Añjana

A kind of domestic lizard.

May be of the following species *Calotes* sp., *Hemidactylus* sp.

Ādi vi. 26a.

Sun iii. 27b.

Utt V. 4b. XXI. 38b. XXiii. 15a.

Aśva (Also Haya, Hari, Vāha, Vājīn, Vadana, Turaga, Turaṅga).

Horse. *Equus caballus*

RV I. 20.2, 28.7, 40.2.

III. 26. 3

IV. 15. 1

V. 30. 14

VI. 59. 3

IX. 64. 3

X. 68. 11

Occurs also at other places.

S.B. 6.2.1.18, 6.3.3.13, 6.5.

2.19, 12.2.2.17, 13.1.2.5-8,

13.2.7.9

A.B. 6.30.9

G. VII. 15 ; XIII. 16, 21 ;

xix. 17

B. 1. 10.29, 19.8 ; II. 3.9,

6.34 ; III. 10.15

Vas. XXVI. 17, XXVIII. 9

Pan. II. 4. 27.

V. 2. 19

VI. 2. 42

VII. 1. 51

Adi I. 101a, iii. 8b, etc.

Ayo xii. 11a, xiii. 23b, etc.

Aro ix. 19b. xxviii. 27b, etc.

Kis xxxiv. 14a, XLiv. 39b.

Sun XI. 10a. xii. 25b, etc.

Yud XViii. 26a. xix 35a, etc.

Utt. vii. 56. xxvi. 47b, etc.

MS VIII. 14b, 159

XI. 38, 136, 199

K I. 11, VI. 39, VIII. 41 ;

XV. 15, 31 ; XVI. 28,

43

R III. 50, 65 ; IV. 70, 71 ;

VII. 39, 42, 44, 47, 52 ;

IX. 50, 66 ; XVIII. 23

Mal. V. 14, p. 91

A I. p. 23

VP 9.42-4, 46-7, 57-68,  
80.15, 82.14

MP 8.8, 93.61, etc.

From B (I. 10. 29), dealing in horse appears to be a condemned practice for Brāhmaṇas. B (I. 19. 8) prescribes the same punishment for killing a horse as for murdering a Śūdra. The dust, raised by the horse's hoof, is not regarded as insanitary in a residential house. In certain cases, it is recommended as an object of gift.

Described by Kālidāsa as drawing chariots. Horses of *Vanāyu deśa* (Persia or Arabia) appear to have been good mounts. Used as a present to a king and in hunting. Sacrificed in *Aśvamedha-yajña*.

The VP. states that it is a good gift for Brahmins in *Śrāddha*. It is also useful in sacrifices. Houses of the Gāndhāra country are said to be the best.

The MP recommends (93.61) its gift in certain rites. The horses of Āraṭṭa are said to be the best (48.7).

Aśvatara

Mule.

It is the F<sub>1</sub> hybrid of male ass and female horse with

characters more akin to that of the genus *Equus*.

Utt. xxxi. 22b.

VP. 9.42-44

Avi (Also Urabhra, Meṣa)  
Sheep.

*Ovis ammon*

S. B. 6.2.1.18, 12.7.2.7

G VII. 15; XII. 22; XVII. 22

B 1. 12.4, 11; II. 3. 9

Vi. 80. 4

Pan. IV. 2. 39

V. 1. 8, 4. 28

MS. V. 8

VIII. 235

YS I. 7. 170

YS II. 10.159

VP 78.17

One of the rural animals whose flesh is edible according to B. which, however, prohibits the drinking of its milk. In partition, B. prescribes a greater share of these animals for the eldest brother. According to VP, its milk is a taboo in *Śrāddha*.

Babhru

A kind of ichneumon.

*Herpestes* sp.

B 1. 19. 8.

MP. 219.21

Generally the same as *nakula*. But, being used side by side with *nakula*, it appears to denote a distinct kind of ichneumon as dis-

tinguished from the ordinary *nakula*.

The *Prāyaścitta* for killing it is the same as for murdering a *Sūdra*.

According to MP., its hair stands erect at the sight of poison.

Balivarda

Bull. *Bos indicus*.

Mal. IV. p. 73.

MP. 106.4

According to MP., one making a pilgrimage riding a bull incurs heavy sin.

Bhadra (A kind of elephant)

Ādi. vi. 27a

Bhadramanda (Do)

Ādi. vi. 27a

Bhadramṛga (Do)

Ādi. vi. 27a

Biḍāla (Also Mārjāra)

Cat. *Felis domestica*.

Pan VI. 2. 72.

MS. XI. 131, 159.

A VI. p. 226.

Mal. IV. p.p. 58, 76.

Ādi. vi. 26a

VP. 54.40

Described by Kālidāsa as feeding on mice and preying on birds.

Camara (Camari)

Yak. *Bos grunniens*.

Ara. XV. 4b.

Utt. vi. 45b.

Me. 55

K I. 13, 48.



R IX. 65.

MP. 118.58, 209. 2, 27

Described by Kālidāsa as having a bushy tail, and living in the forest. Its bushy tail is stated to be used as a fan.

Chāga (Also Aja, Vasta)

Goat. *Hemitragus jemlahicus*

RV. I. 162. 3

IX. 67. 10

X. 134. 6

vi. 80. 6

G I. 18

Ap I. 3. 6

Vas XI. 63 ; XXI. 23

Yud Iii. 23b.

MP 93.62

Chāgala

She-goat. Same as Chāga.

Yud xix. 42b.

KS 11.6.41, 44

Chuchundari

Mole. *Talpa micrura*

Shrew, *Suncus caeruleus*

MS xii. 65

YS iii. 213

Cillika

Ādi. xxvii. 12b

Cīna

A kind of deer, probably so called as it feeds only on paddy of the Chinese variety.

Mbh. V. 10.86

Dantin (Also Karin, Gaja, Mātaṅga, Dvirada, Dvipa,

Anekapa, Hastin Vāraṇa, Nāga, Kuñjara, Śuṇḍāra, Ibha, Kalabha, Stambe-rama). *Elephas maximus*. Elephant.

Ayo XCI. 14b

Utt cxiii. 18a

K VIII. 33, 69 ; XIII. 25, 38, 39, 41 ; XIV. 39, 42 ; XV. 8, 10 ; XVI. 2, 28, 30, 31, 32, 38, 50

R I. 71

RS I, 15

MP 109.23, 116.25, 152.16, 117.12, 180.32 etc.

The MP states (152.16) that it is dangerous for an elephant to slip in mud.

Dardura

Frog. Vas XXI. 24. *Rana tigrina* × otherspecies *Bufo melanostictus* × other species

Its killing is prohibited on pain of penance accompanied by gift.

Ḍerikā

*gandha-mūṣikā*, according to a commentary.

Grey musk shrew. *Suncus murinus*.

B. I. 19. 8

Ap. I. 25. 14

The *prāyaścitta* for killing it is tantamount to that for killing a *ḍiḍḍikā* (q.v.).

### Dhenu (Also Go)

Cow, particularly one that has recently calved. *Bos Indicus*.

G VII. 15, XIII. 29, XVII. 28; B. I. 19. 5, 6; III. 4.5, 8.19; AP. I. 17. 24, 30; 26.1, 31.11; Vas XIV. 45, 46

Ādi IV. Ia.

Ayo XXV. 8a.

MP 52.18, 53.13, 105.20, 118.52, 145.17, 171.40

Yud Viii. 12b, CXiii. 82a.

Utt IV. 9a, 11b, etc.

A V. p. 159

K VIII. 38

R II. 1. 4, 15, 26, 49, 52, 62, 67, 71

Its milk is used for *homa*.

A cow, with a calf, is regarded as auspicious if seen at the time of starting for a journey.

Its killing according to DS., particularly without sufficient reason, is prohibited on pain of severe *prāyaścitta*. Its milk, within ten days of calving, is prohibited. Its flesh is edible according to A. According to V. this flesh is *medhya* (pure or fit for sacrificial purposes).

### Dhurya

Horse or bull (lit. that which is tied to a *dhur* or

yoke for drawing a cart or chariot).

*Equus caballus* (Horse) or *Bos indicus* (Bull)

R I. 54

Ayo xi. 10b

Ḍiddikā

Mole? *Talpa micrura*

B I. 19.8

The *prāyaścitta* for killing it is the same as that for murdering a *Śūdra*

Dvikhuri

Two-hoofed animal.

B I. 12.6

The following animals appear to be included in this class :

*Rṣya*, *haraṇa*, *prṣata*, *mahiṣa*, *varāha*, *kuluṅga*.

Dvipa

(Same as Hastin)

So called probably because it drinks water with two things, viz trunk and mouth.

Ādi Vi. 26b.

Ayo xxxix. 42b, XIV. 8b, etc.

Ara xxx. 27b, xxxiv. 10b, etc.

Kis ii. 8b, xv. 2ab.

Sun iv. 8b, xv. 28b, etc.

Yud iv. 2a, vii. 34b, etc.

Utt vii. 28a, xxi. 24a.

MS vii. 192

A v. 5

K I. 6, VIII. 33; XIV. 40, 46

R II. 7. 37, 38 ; III. 32,  
VII. 42, XIV. 38, XVI. 3,  
39, 68 ; XVIII. 8, XIX.  
11

RS II. 15

Dvīpī

Tiger, panther, leopard.  
Probably so called as it  
has two colours on its  
body.

(1) *Panthera tigris*—Tiger

(2a) *Panthera uncia* } Leopard  
(2b) *Panthera pardus* }

Ayo 94.7 C iii. 7a.

Ara I iii. 42a.

Yud xi. 38b.

Utt vii. 20b, xxxi. 13a, etc.

Mbh. iii. 64.2

Dvirada

(Same as Hastin)

Kis. iv. 9.62

Me. 61

K VIII. 64

R IV. 38, 39 ; VII. 39, IX.

73

Eka-śapha

One-hoofed animal.

(1) Horse—*Equus caballus*

(2) Ass—*Equus hemionus*

(3) Mule—*Equus* sp.

G XIII. 22, 2b ; XXVIII. 13

B I. 12.11

Vas II. 28

The milk of such animals in  
prohibited for drinking.

Eka-sṛka (Same as Śṛgāla)

*Canis aureus*—The common  
Indian Jackal

Ap. 1. 10.19. 11.29

Its howl, when heard, causes  
cessation of studies.

Elaka (Same as Avī) *Ovis*  
*ammon*

Ap. I. 17.22

Its milk is undrinkable.

Eṇa (Same as Hariṇa)

R IX. 55

KS II. 6.41, 44

Eṇī : She deer.

Ap. I. 3.3

Its skin is prescribed as an  
upper garment for a  
Brāhmaṇa Brahmacārin.

Gaja (Same as Hastin)

B. I. 1.11

II. 6.34

Vas III. 11

KS II. 6.4, II. 8.19

Adi XX, 10a, xlii. 12b, etc.

Ayo vii. 30, xii. 11b, etc.

Ara vii. 76, XV. 6a.

Kis ix. 43a, xiii. 47a, etc.

Sun iii. 14ab, xi. 13a, etc.

Yud xi. 43b, xiii. 15a.

Utt V. 4b, vii. 5a.

MS XI. 136

YS III. 5.271, 274

V IV. 5, 14, 23, 28, 35, 45,

46, 56, 62, 63, 71

V. 18

A I. p. 52, VIII. 31

K III. 37, IV. 31, VII. 32,

52 ; XIV. 23, 33, 41, 43, 46,

49 ; XVI. 28, 29, 36 ; XVII.

29

R IV. 29, 45, 69, 76

- V. 43, 48  
 VII. 46, 48  
 IX. 10, 15, 65, 71  
 X. 86  
 XIII. 74  
 XVI. 2, 33  
 XVII. 21, 52, 66  
 XVIII. 5  
 RS I. 14, 19, 27  
 The dust, raised by it, is regarded as good for health in a residential quarter, according to B.
- Gandhadvipa**  
 Scent-elephant, i.e. elephant in rut. Same as elephant  
 V V. 18  
 R VI. 7, XVII 70
- Gardabha** (Also Khara, Rāsabha)  
 ASS *Equus hemionus*.  
 Derived from root *gard*, it means that which makes itself known by its bray.  
 G XII. 20; XVI. 8; XXIII. 5, 17  
 B II. 1.3, 30, 6.34  
 AP I. 10.19; 26.8, 28.19, 21  
 KS II. 6.41  
 Ara XXX. 5b  
 Its bray, according to DS., causes cessation of studies. Its flesh is necessary in the expiation of sin incurred by a Brahmacārin indulging in sexual intercourse with a woman (A, B). Among other things, the wearing of its skin is prescribed in expiating the sin arising from the destruction of *bhrūṇa* (foetus).
- Gaura Hariṇa** (Śveta Mṛga).  
 White deer.  
 RV. V. 78.2; VII. 87.6
- Gavaya** (Also Gomṛga)  
*Bos gaurus* and also a hybrid of *Bos gaurus*.
- Gayal**  
 S. B.  
 A. B.  
 AP I. 17.29  
 Vas. XIV. 41, 43  
 Vi. 80.9  
 K I. 56  
 R IX 53  
 RS I. 23, 27  
 MP 118.58  
 Its flesh is not edible (A). According to Mallinātha, it is rarely seen.
- Go** (Also Dhenu)  
 Cow. *Bos Sp.* Derived from root *gam* it means that which can move on ceaselessly.  
 RV I. 38.2  
 II. 16.8  
 III. 45.3  
 IV. 5.3  
 V. 1.1  
 VI. 24.4  
 VII. 2.6  
 VIII. 33.6  
 IX. 12.2  
 X. 31.10

Occurs also at many other places.

G VII. 15; XIII. 29; XVII 28; XXII. 14

B I. 19.5, 6; III. 4.5, 8.19

Ap I. 17.24, 30, 26.1, 1, 31.11

Vas XIV. 45.46

S. B. 6.2, 1.18, 12.7. 2.7

Go : Pan.

Adi I. 101b, ix. 56ab etc.

Ayo ii. 34a, xviii. 36b etc.

Ara xx, 29a, xxix, 28b

Kis IV. 3b, xvi. 33a etc.

Sun XV. 27b, xviii. 32b etc.

Yud vii. 33b, xi. 38a etc.

Utt vi. 44b, xxii. 7a etc.

V. 8

Ms VIII. 146, 242

XI. 130, 133, 135, 136, 137

YS I.7.170, 9.20, 20 etc.

II. 10.159

III. 5.271, 272, etc,

R I. 88. II. 3, 29, 48, 49, 61, XVII. 19.

RS III. 16.

VP 9.42-44, 23.69, etc.

Pāṇini's grammar contains a lot of information about cows which were, perhaps, the most well-known domestic animals.

A herd of cattle was called *samaja* and a drive to the pasture *Udaja* (III. 3. 69).

Cows appear to have grazed in pastures called *gocara* (III. 3. 119). Such a land,

when abandoned, was called *gauṣṭhina* (V. 2. 18). A wild region, with the fodder eaten up, was known as *aśitaṃgavīna aranya* (V. 4. 7). From these words we can infer that the owners of cows were on the look-out for fresh fields and pastures new when the old ones no longer provided food for cattle.

The word *Kaḍaṅkariya* (V. 1. 69) indicates that the cattle used to feed on straw which was called *Kaḍaṅkara*. Pāṇini VII. I. 51 shows that salt constituted part of fodder for cattle.

*Nipāna* and *āhāva* (III. 3. 75) appear to have been troughs for watering cattle.

It is interesting to note that the word *gotra*, according to Pāṇini (Pan IV. 2. 51), means a multitude of cows. In Vedic language, *gotra* means the common shed for cows of different families. The word *gotra*, applied to descendants of a common ancestor, appears to have owed its origin to the word used in the above sense. Tantiṭpāla (Pan VI. 2. 78) seems to have been an officer-in-charge of royal cattle. The *Sūtra* for the

formation of this word belongs to Vedic accentuation. So, such an officer, perhaps, figured already in Vedic society.

That cows were allowed to graze without a responsible keeper is proved by the fact that a cowherd of a certain age was regarded fit for this purpose. Such a cowherd was called *anugavīna* (Pan. V. 2. 15).

That cows played an important rôle in the life of the people is proved by the fact that there are various terms denoting cows at various stages of growth and in different conditions. Thus, a heifer reaching puberty is called *Upasarya* (Pan III. 1. 104), its first mating being known as *Upasara* (III. 3. 71). In case of miscarriage, it is called *Vehat* (II. 1. 65). Just before delivery it is called *adyasvīna* (Pan V. 2. 13), i.e. calving to-day or to-morrow. After delivery it is called *gr̥ṣṭī* (Pan II. 1. 65). *Mahā-gr̥ṣṭī* (Pan. VI. 2. 38) means a cow that continues to give milk up to the delivery of the next calf. *Vaṣkayanī* (II. 1. 65) is the designation of a cow after about six

months of its calving. The term *samāṃsamīnā* (Pan V. 2. 12) means a cow which calves every year.

That cows were pledged till the repayment of debt is proved by the word *dhenusyā* (Pan IV. 4. 89) which denotes a cow kept as security.

A very young calf was called *Śakṛtkari* (Pan III. 2. 21). A calf, restrained while out for grazing, was called *prasaṅya* (Pan IV. 4. 76); *prasaṅga* denotes a wooden club hanging from the neck of a calf. A two-year old calf is called *dityavāh* (Pan VII. 3. 1) A male calf, chosen to be a stud bull, is *ārṣabhya* (fit for being a bull, Pan V. 1. 14). When growing up, it is called *jātokṣa* (Pan V. 4. 77). A young bull, a more developed one, a fully grown up bull and one in advanced age are called respectively *ukṣa*, *ukṣatara* (Pan V. 3. 91), *mahokṣa* (Pan V. 4. 77) and *Vṛddhokṣa* (Pan V. 4. 77) or *ṛṣabhatara* (Pan V. 3. 91).

After the age of three a bull is given a nose-string (*nāthahari* III, 2. 25) and is castrated.

Bulls, meant for drawing

carts, etc. are classified in accordance with their work. That drawing a chariot is *rathya* (Pan IV.4. 76), a yoke *yugya* (Ibid), a cart *dhurya* or *dhaureya* (Pan IV. 4. 77), a cart *śakaṭa* (Pan IV. 4. 80), the plough *halika* or *sairika* (Pan IV 4. 81). From Pan IV. 4. 78 we learn that a bull, tied to both the right and left sides of the yoke, is called *sarvadhurīṇa* (Pan IV. 4. 78) and that to one side only *ekadhurīṇa*.

Pan IV. 2. 136 refers to the bovine species born in Sālva country. It was, perhaps, regarded as very good.

Pan IV. 2. 112, VI. 3. 115 refer to *lakṣaṇa* or the branding of cows with different marks on their body, particularly ears. From the latter it appears that different marks were put on the ears of cows to indicate difference in their ownership. Some of the marks stated are *vista* (?) *maṇi* (jewel), *bhinna* (pierced), *chinna* (broken), *chidra* (hole), *sruva* (ladle), *svastika* (the sign so called).

The cow is mentioned as useful offering in sacrifices and as gifts to Brāhmins. In describing the end of

Kali Age, the VP. states that the number of cows will diminish and that cow-slaughter will be a sin.

Godhā

Iguana. *Varanus* Sp.

RV VIII. 69. 9

X. 28. 10, 11

V. S. 24. 35

J. B. 1. 221

P. B. 9. 2. 14

G. XVII. 25

B I. 12. 5

Ap. I. 17. 37

Vas. XIV. 39

Pan IV. 1. 129-130

MS V. 18

XI. 131

YS I. 7. 177

YS III. 5. 270

A. VI. p. 184

MP 257.12

One of the five-toed animals whose flesh can be eaten, according to DS.

Certain low-class people appear to have used it as food, according to Kālidāsa. According to MP., if a tree cut down for building purposes is found to be very yellow, it is supposed to indicate fear from lizards.

Gokaṇṇa

*Deer antelope picta* ?

Ayo C Xi. 48b.

Kis i. 13a.

Go-lāṅgūla

- A kind of black monkey.  
*Macaca silenus* (Lion-tailed Macaque)  
 Ayo Iiv. 30a.  
 Ara XX. 26b.  
 Kis xxiii. 46, xxxv. 30a etc.  
 Yud iii. 32C, xvi. 20a etc.  
 Utt XCVIII. 14a.  
 MP. 118·57
- Gomāyu (Same as Śṛgāla)  
 So called as it makes a distorted sound, according to Kṣīrasvāmin, commentator on the *Nāmalingānuśāsana*.  
 Ayo XCI. 18a.  
 Ara xIvi. 15b, ixv. 2b etc.  
 Yud xi 35b, xviii. 55a etc.  
 MP. 146·66
- Bhāgavata Purāṇa, V. 13.2
- Go-pati  
 Bull. *Bos indicus*  
 Ara iii. 4b.
- Go-puccha  
 A sort of monkey.  
 Adi XX. 10b.  
 Kis xxvi. 2b.
- Hanūmat  
 Ape. *Presbytis entellus*.  
 Utt xxxviii. 53b, xxxix. 11b etc.  
 Ādi i. 78a, iii. 62 a etc.  
 Kis i. 5a, ii. 1a. etc.  
 Sun i. 14b, ii. 1b. etc.  
 Yud iv. 12b, vii. 27C.
- Hari  
 Monkey. *Macaca* sp.  
 Ādi. 1. 74b, iii. 86b etc.  
 Ayo. CV. 23a, CVi. 3b
- Ara XV. 4a, xx. 26a, lxxvii. 73a  
 Kis. xxxi. 4b, xxxii. 9a etc.  
 Sun i. 7b, ii. 1a etc.  
 Yud i. 13b, ii. 3a etc.  
 Utt xxiii. 20a, xxx. 28b. etc.  
 Lion. According to Mahidhara on the following texts, a lion is so called as it has tawny colour.  
 YV. viii. 11 and xiii. 42  
 Hariṇa (Also Mṛga, Kuraṇ-gama, Rṣya, Nyāṅku Eṇa).
- Deer  
 (1) (Muskdeer — *Moschus Moschiferus*.)  
 (2) Spotted deer or chital—*Axis axis*.  
 (3) Barking deer—*Muntiacus muntjak*.  
 (4) Black antelope (Black buck) or Indian antelope — *Antelope cervicapra*.  
 (5) Swamp deer or Barasingha—*Cervus duvauceli*.  
 (6) Sambar—*Curvus unicolor*.  
 RV I. 163, V. 78. 12.  
 Me 83, 109.  
 K V. 13, 15, 35.  
 R II. 11, VIII. 79, IX. 57 ; XIV. 69, XVIII. 13.  
 V I. 4, 9.  
 A I. 23, VI. 17.  
 RS II. 8.  
 VP 69. 206  
 MP 180. 25  
 One of the two-hoofed animals whose flesh can be



eaten (B). Its skin is prescribed by A. as an upper garment for a Brāhmaṇa Brahmacārin.

Object of hunting, according to Kālidāsa.

Haryakṣa

Lion. So called, according to yāska, as its eyes are *hari* or tawny.

*Panthera leo*

YV. xxx. 21

Hastin Fem. Hastini

Elephant. *Elephas maximus*  
RV I. 64. 7 ; III. 36. 7. IV.  
16. 14 ; VIII. 33. 8 ; X.  
18.3

KS. VII. 2. 34

KS stated Hastini as a type  
of women.

SB 3. 1. 3. 4

Pan II. 1. 62 ; III. 2. 54 ;  
V. 2. 133, 3. 88

A VII. p. 187

Mal I. p. 16

Ādi V. 13b, lxxx. 3b

Ayo ii. 31a, xxxv. 40b.  
etc.

Ara ii. 3b, iv. 34a, etc.

VP 69. 211, 231-34 etc.

Kis ix. 107a, xlix. 13a.

Sun iii. 15b, xi. 7b. etc.

Yud iii. 15b, xi. 7b. etc.

Utt xxxi. 5a, xlii. 35a.

According to Sāyaṇa on  
RV. X. 18.3 *hasta* means  
that by the movement of  
which love is indicated.

For the elephant it is the  
trunk (*hasta*). Being possessed  
of *hasta*, it is called  
*hastin*.

A species of elephants is  
stated by Kālidāsa to emit  
fragrant ichor. Elephants  
are said to feed on *Sallakī*  
trees. Sometimes decorative  
designs are described  
as painted over bodies of  
elephants. Described as  
chained to posts. Driven  
with the help of a goad.  
Sometimes described as  
rubbing their cheeks against  
*Devadāru* trees. Elephant-  
skin supposed to be put on  
by Śiva.

According to the VP (80.15)  
an elephant is good as a  
gift to Brahmins in a  
*Śrāddha*. It is also *Yajñiya*  
(useful for sacrifice).  
Making of gifts under the  
shadow of an elephant is  
meritorious (VP 80.45)

Haya (Same as Aśva)

Horse

MS XI. 136

YS III. 5. 273

K VIII. 42

R IX. 10

Ādi vi. 24 ab, xi. 12a. etc.

Ayo xvi. 13a, xxxix. 47b. etc.

Ara ii. 3b, ix. 10b. etc.

Kis xlv. 74b

Sun xx. 6b, xli. 7a, ix. 20a

- Yud vii. 33a, ix. 26b. etc.  
 Utt vi. 44a, xxvi. 7a, 8a.  
 etc.  
 Ibha (Same as Hastin)  
 Probably so called as it is  
 fearless (*i itaṃ vigataṃ bhayaṃ  
 yasya saḥ*).  
 Nirukta, vi. 12.1  
 R IV. 47, 59  
 K XII. 15, XIII. 22, XIV.  
 26, XV. 23, XVI. 21.  
 Ihāmṛga  
 Wolf. *Canis lupus*  
 Sun XX. 11b.  
 Yu IXXX. 69a.  
 MP. 163-1  
 Jambuka  
 Jackal. *Canis aureus*  
 Kis Xix. 20a.  
 Kakuda  
 Hump of a bull  
 Ayo viii. 42a.  
 Kakudmān, Kakudmin (Same  
 as Vṛṣa) *Bos indicus*  
 K I. 56  
 R IV. 22  
 MP. 93.60  
 Supposed to be used by  
 Śiva as his mount.  
 Kalabha (Same as Hastin)  
 V V. 18  
 Mal. V. p. 92  
 Me. 89  
 R III. 32  
 Kālapuccha  
 A species of animals living  
 in marshes. A kind of  
 sparrow is also so-called.  
 It is not clear which is  
 meant here.  
 MP. 118.60  
 Kambala  
 A sort of deer with a shaggy  
 coat of hair.  
 Utt. xxxi. 22b. *Cervus*  
*unicolor* or *Cervus* sp.  
 Kambu  
 Elephant (?)  
 Sun xxxii. 10a.  
 Utt xxviii. 12b, xxxi. 8b.  
 Kānanaukas  
 Literally, that which has  
 a forest as its abode ;  
 monkey.  
 Sun Ix. 12a, Ixvi. 7a, 12a,  
*Macaca* sp.  
 Yud xvi. 19a, xxxi. 17b,  
 I xii. 12b.  
 Kapi (Same as Vānara)  
 Monkey.  
 Adi i. 78a, 83b,  
 Ara Ixxvii. 75a, 76a,  
 Kis i. 13a, ii. 25b etc.  
 Sun i. 8b, ii. 25b etc.  
 Yud ii. 47a, iv. 17a etc.  
 Utt. xxiii. 35a, xxxviii. 55a  
 etc.  
 YS III. 5. 272  
 R XII. 59, XIV. 19, XV. 58  
 RS. I. 23.  
 Kapilā  
 Brown cow. *Bos indicus*  
 Ayo I xxix. 20a  
 Karabha  
 Young elephant  
 Utt xxxviii. 73b

# Karāla

Musk-deer. *Moschus moschiferus*

MP. 118.60

Kareṇu (Same as Hastin, female species)

Ayo ix. 5a, xiii. 23a etc.

Kis xiii. 10b, xlv. 44b

Sun XV. 28b, xxiii. 16b, XXViii 28a

Yud Ixxiii. 14b, XCV. 6b etc.

Utt. xxi. 3b, 16b

K III. 37

R VI. 17, XVI. 16, 68

Karin (Same as Hastin)

Sun XV. 18b

Yud xxxv. 9C

Utt. vi. 44a, vii. 12a etc.

K I. 9, IX. 42, XIV. 14, 19; XVI. 33, 34, 35, 39.

R III. 3, 37, IV. 48, 57, V. 50, XVI. 78.

V IV. 29, 42, 45, 54, 56.

Mal. V. I.

Kāsāra (Same as Mahiṣa)

Literally, that which approaches *Ka* or water.

AV. XVII. 3.42

K XIV. 7

Buffalo. *Bubalus bubalis*.

Kesarin (Same as Simha)

Vāj. sam. xix. 91

So called as it has *Kesara* or manes. According to some, its derivative meaning is that which is emaciated in *Ka* meaning water or dew.

A VII. p. 242

K I. 6, XI. 43, XIV. 28

*Panthera leo*

R II. 29, IX. 54

RS. I. 15

Khaḍga, Khaḍgin

*Rhinoceros unicornis*

B I. 12. 5

G XVII. 25

Ap. 1. 17. 37

Vas XIV. 47

Vi 79. 16.

MS. V. 18

R IX. 62.

Adi xxvii. 13b.

Ayo xxv. 33a.

VP. 60.207

MP. 118.61

Though five-toed, its flesh is prohibited (B). According to A, its flesh is edible, V. refers to the difference of opinion on this question.

Khara (Same as Gardabha)

*Equus hemionus* (ass)

G XII. 20, XXIII. 5,

Ap. I. 28. 19, 21.

B II. 6. 34.

Pan IV. 3. 35.

Ayo Ixxxix. 13c, C. 55a etc.

Ara Ivi. 31a, I vii. 49a.

Sun xviii. 30ab, xxvii. 16a etc.

Yud xi. 38a, xxvii. 26b etc.

Utt vi. 44b, xxxiii. 37a etc.

MS. XI. 154, 199.

YS II. 10. 160.

III. 5. 271, 277, 280.

MP. 118:58

Its skin is to be put on by one atoning for the sin arising from the desertion of one's youthful wife, and from the killing of *bhrūṇa* (foetus), A. The dust, raised by it, is inauspicious (B).

Koka

Wolf. *Canis lupus*.

Ara. Iiii. 42b, Sun. xxvi. 9b,

Yud, xxviii. 18b

Kola (Same as Varāha)

Vas IV. 48.

Kṛkalāsa

Garden lizard. *Calotes versicolōr*.

Ref. TS.

Ref. VS

J. B. 1. 221.

Utt. xviii. 5b, 29a, etc.

MP. 250. 12

Kṛkavāku

Lizard, chameleon. *Chamaeleon* sp.

AV. 5. 31. 2.

VS. 24. 35.

MP. 219:19

Nirukta, 12. 3.

Kṛṣṇamṛga

A kind of deer. Black antelope.

A VI. 17.

Kṛṣṇasāra

The spotted deer or Black

Buck—*Antelope cervicapra*

V IV. 57

A I. p. 16, 20.

K III. 36.

R IX. 55, XIII. 34.

Kroṣṭu (Same as Śṛgāla)

So called as its cry is heard from afar.

Pan VII. 1. 95.

Bhaṭṭikāvya, V. 80

Kṛṣṇa

A kind of animal feeding on carrion.

Av. xi. 2.2

G I. 18.

Vi. 79. 16.

Kukkura (Same as Śvan) *Canis familiaris*.

Probably an onomatopoetic word; that which makes a sound like *kur kur* while scratching the ground.

MP. 118:59

Bhāgavata Purāṇa. ix. 24. 19

Kuluṅga

Antelope.

*Vājasaneyī Saṃhitā*, xxiv. *Taittirīya Saṃhitā*, V.

B I. 12. 6. Either *Antelope cervicapra* or *Gazella gazella*

One of the five-toed animals whose flesh is prohibited.

Kumuda

An unidentified animal?

Utt XXX. 7a

Kuñjara (Same as Hastin)

Ādi xiv. 37a, XXvii. 13b, liv. 19b,

Ayo xi. 26a, xx. 4a, etc.

Ara XV. 4a, xxxii. 29b, etc.

Kis ii. 8a, xiii. 10a, etc.  
Sun ii. 15a, V. 21a, etc.  
Yud iv. 10a, xvi. 20b.  
Utt vii. 11b, xxi. 3b,  
etc.

R VII. 39

RS. II. 1

Kuraṅgama (Same as Hariṇa)

Vas IV. 71

Mahiṣa (Also Kāsara)

*Bubalus bubalis*.

Buffalo. (Wild buffalo)

Literally means that which  
gets pleasure in water.

RV 6. 17. 11 ; VIII. 17. 10 ;

IX 87.7

KS VII. 2. 32.

B I. 12. 6 ; II. 2. 5.

G XII. 21 ; XVII. 21.

Vas XIV. 35.

Vi. 80. 10.

MS V. 9

YS II. 10. 159.

A II. p. 65

R IX. 61, XVI. 13.

Ayo xxv. 33b, lxv. 20a, cvi.

4b, cviii. 4b, cxi. 48a

Ara. xv. 4b, lxxvi. 17a

Kis xlix. 13a

Sun xv. 40a, xviii. 30a

Yud xv. 18a, xxxvii. 31a,

78b

Utt xx. 19a

MP 118.58, 209.24

One of the two-hoofed  
animals whose flesh can be  
eaten. The rearing of she-  
buffaloes for livelihood is a

minor sin (presumably for  
a member of the twice-born  
classes)—B. The milk of  
it, within ten days of calv-  
ing, is prohibited.

Described by Kālidāsa as  
bathing in pools.

Maṇḍa (a class of elephants)

Ādi vi. 27a

Ara xx. 25b

Māndhālā

Flying fox, according to  
Monier Williams. It is a  
kind of frugivorous bat  
whose head is fox-like with  
long snout and large eyes.

*Pteropus giganteus*

Maṇḍūka

Frog. *Rana tigrina* and other  
species and *Bufo melanos-*  
*tictus* and other species.

G I. 64 ; XXII. 21.

B I. 19. 8

Ap I. 25. 14.

The *prāyaścitta* for killing  
it is the same as that for  
murdering a Śūdra.

Mārjāra (Same as Biḍāla),

*Felis domestica*.

The term is derived from  
root *mṛj*—to cleanse.

The cat is so called as it  
cleanses its body by licking.

Vas XXI. 24 ; XXIII. 29.

MS iv. 126

KS II. 6. 41.

AYo cxxv. 2a

KIS I. 16b, xxvi. 2b

Yud xi. 38b

Utt vii. 21ab

MP 118.57

The sin for killing it can be atoned for by penance for twelve nights and some gifts. Students engaged in study, between whom a cat passes, have to abstain from food for one day and one night (V).

Markaṭa (Same as Vānara)

Monkey. *Macaca Sp.* The derivative meaning, according to some, is that which moves according to the course of the wind.

Taitt Saṃhitā. VI. 4. 5. 7

MP 146.63, 217.21, 219.21

It is said to pass urine at the sight of poison. It is recommended to be kept in a stable.

Mataṅga

Elephant. (Same as Hastin)

Ādi xx. 16a

Ayo ii. 13b, xx. 39b, etc.

Ara xx. 26a, lxx. 26a, lxxxi. 28b

Kis. xxix. 10b, xliii. 13b

Sun iv. 5b, v. 32b, etc.

Yud iii. 40a, vi. 26a, etc.

Utt ix. 20c

Meḍhra

Sheep. (1) *Ovis ammon*

(2) *Ovis orientalis*

KS III. 3. 16

Meṣa (Also Avikā, Ūṇāvati,

Urabhra) *Ovis ammon*

*Ovis orientalis*

Ram.

RV I. 126. 7.

VIII. 56.3

X. 27. 17.

KS I. 4. 8, II. 1. 29,

IV. 1. 33, VI. 1. 25,

VII. 1. 36.

MS XI. 136.

YS III. 5. 271.

KS mentions ram-fight.

Ādi I. 6a, 7a, etc.

Ara xvi. 15a, 17a, etc.

Utt xxxviii. 29b

MP 146.63

Mṛga (Same as Hariṇa. Fem.

Mṛgī)

Literally, that which searches (for food ?)

RV I. 38.5 ; I. 105.7 ; V.

78.2 ; X. 146.6

KS IV. 1.33, VII. 2.35

Pan. II. 4.12

IV. 2.80

IV. 3.51

VII. 3.53

MS xi. 69

K I. 46, III. 31, VIII.38, etc.

IX. 25, XIV. 10, XV. 41

R I. 40, 50, 52, etc.

V IV. 8, 59, etc.

A I. p.p. 15, 16, etc.

RS I. 11, 25 ; II. 9, IV. 8,

VI. 12

Gīta x. 30

Ādi iii. 53a, viii 32a, etc.

Ayo ix. 18b, xxiv. 5a, etc.

Ara i. 34d, v. 9b, etc.  
 Kis xvii. 16b xviii. 5b, etc.  
 Sun xv. 40a, xvii. 8a  
 Yud xxviii. 18b  
 Utt xvii. 21b, xxi. 66a, etc.  
 MP 21·9, 118·56, 180·40  
 According to Pāṇini, *Mṛga*  
 denotes both wild beast  
 (IV. 3.51) in general and  
 deer (II. 4.12). Pāṇini  
 mentions two types of deer,  
 viz. *Mṛga* (IV. 2·80) or  
 the white-footed antelope  
 and *Nyahku* (VII. 3.53) or  
 gazella.

*Mṛga* (elephant with particular  
 marks)

Ādi vi 26a, 27a

Ara vii. 2a xx. 25b

*Mṛgādhipa* (Same as *Siṃha*,  
*Mṛga-rāja*) *Panthera leo*.

K XIV. 29

Ayo xii. 4b

Kis xviii. 22b, xxvi. 24b

Sun xvii. 49b, lxiv. 28a

Yud XXXV. 9a, l. 33b,  
 lxxx. 21a

Utt vii. 11b

*Mṛgādhirāja* (Same as *Siṃha*)  
*Panthera leo*

R II. 41.

*Mṛgamātṛka*

A kind of red-coloured hare-  
 like deer. *Tragulus meminna*  
 (Indian chevrotain—mouse-  
 deer)

MP 118·59

*Mṛgarāja* (Same as *Siṃha*)

Lion

*Panthera leo*.

K XIV. 27, 28

R VI. 3

*Mṛgendra* (Same as *Siṃha*)

*Panthera leo*.

A VII. p. 242

R II. 30, 43, 51

RS I. 27

Ayo xx. 3b

Kis xiii. 47b

Yud xxxv. 15b

*Mṛgeśvara* (Same as *Siṃha*)

*Panthera leo*.

RS I. 14

*Mūṣaka*

Rat. Indian mole rat.

*Bandicota bengalensis*.

G XXII. 21

Vas XXI. 24

MP 118·58, 237·9, 257·14

The *Prāyścitta* for killing  
 it is the same as that for  
 killing a cat.

Extreme increase in the  
 number of rats forebodes  
 famine (MP. 237·9).

If a tree, cut down for  
 building purposes, is found  
 to be extremely brownish,  
 it indicates fear from  
 rats.

*Nāga* (Same as *Hastin*)

*Elephas maximus*.

V. IV 42, 47

A II. p. 63.

K I. 36, IX. 42, XIV. 34

R IV. 23, 83 ; V. 47, 51 ;

VI. 27; VII. 41, XVI. 26,  
41; XVII. 32  
Ādi vi. 25a, xxvii. 24b, etc.  
Ayo. xxviii. 7a, xxxii. 9a, etc.  
Ara. xliii. 4a, lxxviii. 25a,  
31a  
Kis. ix. 35b, xxxi. 22b, etc.  
Sun. iii. 19b, iv. 13a, etc.  
Yud. vii. 33a, xvi. 41bc, etc.  
Utt. x. 19a, xix. 10a, etc.

#### Nakula

Mongoose

*H. auropunctatus*

(1) *Herpestes auropunctatus*

(2) *Herpestes edwardsii*

(more common)

G I. 64; XXII. 21

B I. 19. 8

Ap. I. 25. 14

Vas XXI. 24, XXIII. 29

Pan VI. 3. 75

Yud XI. 38a

MS. XI. 131, 159

YS III. 5. 270

MP. 118.58

The expiation for killing it  
is equivalent to that for  
killing a Śūdra (B, A).  
According to V, it is equal  
to that for killing a cat.  
Fasting for one day and  
one night is prescribed  
by V for students, engaged  
in study, between whom  
it passes.

#### Pañca-nakha

Five-toed (animal).

G XVII. 25

B I. 12. 5

Ap. I. 17. 37

Vas XIV. 39

According to B., it appears  
to include the following  
animals :

*Śvāvit, Godhā, Śaśa,*

*Śalyaka, Kacchapa, Khadga.*

According to one comment-  
ator, it includes animals  
like the jackal, monkey,  
etc. According to an-  
other, it means man,  
monkey, cat, etc.

#### Paśu

Animal

Ādi. V. 5b, xiii. 29a, etc.

Ayo. xxxiii. 19a, lxi. 24b, etc

Yud. xl. 14a, lxxiv. 37b,

xcvii. 14a

Utt. xxiii. 38b, xxviii. 48b,

lxiii. 44a

#### Pherava/Pheruka

Jackal. So called as it makes  
an indistinct sound.

Bhāgavata Purāṇa, VIII.  
16.7

Plavaṅga or Plavaga Mon-  
key. Same as Vānara.

Ādi. iii. 143b

Kis. i. 2a, 6a, etc.

Sun. i.35b, 89a, etc.

Yud. vi. 22c, vii. 26b, etc.

Utt. xxiii. 5b, 40, xxxviii.  
92a, xl. 9a

#### Pracalāka

Chameleon. *Chamaeleon* sp

Ap. I. 25. 14.



## Prṣata (Prṣat)

Spotted antelope dappled cow or mare, according to Monier Williams. It may be spotted deer (*Axis axis*), as no true antelope is spotted.

RV. I. 162. 21

B I. 12. 6

Vas. XXI. 23

Vi. 80. 8

Ara. lxxviii. 13b

Ayo. cii. 2a, cxi. 48b

Mp. 219. 21

One of the two-hoofed animals whose flesh is edible.

(B). According to MP., it weeps at the sight of poison.

## Pūtikhaṣa

Ground Squirrel, Woolly Hare. *Lepus oistolus*.

According to the commentator, an animal like a hare well-known in the Himalayan region. Himalayan marmot (Ground Squirrel) *Marmota bobak* or the Woolly Hare.

Ap. I. 17.37

Rāma-śarabha An unidentified animal.

MP. 118.60

## Raṅku

A kind of deer.

Ayo. xiii. 6b, xxx. 14b, xxxii. 8a, lxii. 19a

## Ara. I. 15b

## Rāsabha (Also Gardabha)

Ass. Derived from root *rās*, it means that which brays by giving warning as it were. Its intermitten bray seems to be like giving warning. *Equus hemionus*.

RV I. 34. 9 ; III. 53. 23 ; VIII. 56. 3

S. B. 6. 1. 1. 11

K XV. 21

Ayo. IxxI. 15a, 19a ; Ixxii. 25b.

## Rkṣa

Bear. (1) *Melursus ursinus* (Sloth bear)

(2) *Ursus arctos* (Brown bear)

(3) *Selenarctos thibetanus* (Himalayan black bear).

Adi XX. 5b, 10b, etc.

Ayo xxv. 33b, xxvii. 11b, etc.

Ara Iiii. 42b, Ixiv. 11b.

Kis xxii. 4b, xxiii. 4b, etc.

Sun xIvooo. 10b, Ixiv. 5a, etc.

Yud iii. 10ab, vi. 16a, etc.

Utt xx. 19a, xIii. 53b, etc.

A II. p. 65

R XIII. 72

MP 118.57

## Rohita

Deer with stripes.

Ara. Ixxviii. 9a

Rohita

Doe

MP 209·26

Rṣabha (Same as Vṛṣa) *Bos indicus*

G VII. 15, XXII. 14, 16,  
18 ; XXVIII. 14, 15

B I. 19. 1, 2, ; IV. 4. 10

Ap. I. 24. 4

Vas. xxi. 22

Ādi xiii. 30b, xlix. 3a.

Kis xxi. 38b, liv. 6a.

Sun xxvii. 14, xxxiv. 6b, etc.

Yud xiii. 2b, xx. 3b, etc.

According to DS, one kind of animals to be given to the king for expiating the sin arising from murder of a person of any of the castes other than Brāhmaṇa.

In certain types of *Prāyaścitta*, it is used as *dakṣiṇā*.

Rṣya

Painted or white-footed antelope, according to Monier Williams. *Antelope* Sp.

B. I. 12. 6.

One of the five-toed animals whose flesh is edible.

Ruru

A kind of spotted or black antelope. *Antelope cervicapra*

Yv. xxiv. 27

G I. 18

B I. 3. 15

Ap. I. 3. 5

Vas XI. 62

Vi. 80. 7

R III. 31, IX. 51, 72

Ayo. c xiv. 33b

Ara. l xxviii. 13b

Its skin is to be put on by a Brahmācārin of the Kṣatriya caste as an upper garment (B, A, V.).

Sabalā

Spotted cow.

Ād. liv. 10b, 11b, etc.

Śākhāmṛga (Same as Vānara)

Monkey. *Macaca* sp.

Ayo. c iii. 7a

Ara. l iii-42a

Utt. xli. 23a

Kis. i. 11a, xvi. 26a, etc.

Sun. i. 36b, xcvi. 14a, 16a

Yud. ii. 15b, iv. 47b, etc.

Salāvṛka, Salāvṛki

According to Haradatta, commentor of the Āpastamba DS., a sort of *Vṛka* (q. v.) or jackal. Hyena. *Hyaena hyaena*

RV X. 73. 3

S. B. 11. 5. 1. 9

Ref. A. B.

Ap. I. 10. 19, 11. 29

MP 25·32

Its cry, when heard, causes cessation of study.

Śallaka (Śalyaka, Śaryaka)

Probably porcupine. *Hystrix indica*.

YS I. 7. 177

AV V. 13.9  
S. B. 2. 6. 4. 5  
B. I. 12. 5  
Ap. I. 17. 37  
G. XVII. 25  
Vas. XIV. 39  
MS V. 18

Śambara (See Hariṇa)

*Cervus unicolor*

A kind of deer. One of the five-toed animals whose flesh is edible (B, A, V).

MP. 118.60

Śarabha

According to Haradatta's commentary on A. I. 17.29, it denotes a kind of eight-legged deer. Seems to be mythical.

S. B. 1. 2. 3. 9

A. B. 2. 6. 8

Vas XIV. 43

A I. 17. 29

Me 56

RS I. 23

Yud. ii. 35b, iii. 44b etc.

Utt. vii. 20a, xxxi. 13a

VP 97.180, 9.42-4

MP 118.56, 135.66, 250.11

Its flesh is prohibited (V, A). According to Mallinātha, an eight-legged deer jumping high.

Sārameya (Same as Śvan) Dog.

*Canis familiaris*—The

domestic dog

Probably so called as it

can have sexual intercourse while moving.

RV I. 62. 3 ; VII. 55.3

Utt. xviii.6b, xxv.12a etc.

Sāraṅga

A kind of spotted deer.

R XII. 24.

Me 21

V IV. 56

A I. p.p. 14, 16, 52.

VI. p. 197.

Mal. III. 1.

Ayo. lxv. 14b, 16b

Kis. xxix. 22b

MP. 180.37

Saraṭa

A kind of lizard.

If a tree, cut down for building purposes, it found to be ruddy or light brown, it is supposed to indicate fear from lizards.

Śārdūla (Same as Vyāghra)

*Panthera tigris*

A VI. 27

K III. 44

Ādi. li. 17a, lxi. 16b

Ayo. xi. 16b, xxvii. 11b

Ara. vi. 3c, vii. 2a etc.

Kis. xviii. 22b

Sun. i. 27b, ii. 47b etc.

Yud. xvi. 39a, xx. 7a

Utt. vii. 20b, xx. 19a etc.

Described as preying on animals.

Śaśa (Śaśaka)

Hare, *Lepus nigricollis*.

RV. X. 28.9

G XVII. 25

B I. 12.5

Ap. I. 17.37

Vas XIV. 39

MS. V. 18

YS. I. 7. 177

Sun. xxiv. 16ab

Utt. xxxii. 14a

MP. 209.21

Its flesh is edible, according  
to DS.

Sedhā

Hedgehog or porcupine.

*Hystrix indica*

YS I. 7. 177

Simha (Also Mṛgendra, Mṛgā-  
dhīpa, Mṛgārāja, Hari,  
Kesarin)

Lion. *Panthera leo*.

RV I. 64.8, 95.5, 174.3

III. 2. 11

IV. 16. 14

V. 15. 3

IX. 89.3

X. 28. 4

YV. V. 2

KS. V. 5. 65

Occurs also at other places.

VP. 93.68, 88.165.192 ;  
92.74

MP. 8.8, 94.4, 117.13

S.B. 3.5.1, 3.5.25, 5.5.4.10,  
12.7.1.8

A. B. 6. 30. 9

Pan. VI. 2. 72

K. I. 56

R II. 27, 33, 38, 60, 61

IV. 72 ; IX. 64 ; XVI. 16 ;

XVII. 52 ; XVIII. 35, 37

A VII. 14

Ara. liv. 46b

Described by Kālidāsa as  
living in caves, roaring  
mightily and preying on  
animals, particularly ele-  
phants. The gait of a hero  
is likened to that of a lion.  
The VP refers (30.139) to  
the caging of lions.

Under Pan. VI. 3.109 *Simha*  
is derived from root *hins* (to  
kill). So, etymologically  
*Simha* means that which  
kills.

Śivā (Also Śṛgāla, Gomāyu,  
Kroṣṭu).

So called as its cry, while  
lying down, is auspicious.

RV. IV. 10.8

G XVI. 8

B I. 18.18, 21.18

Ara. xxix. 6b, 12b

Sun. lxxviii. 20b

Yud. xvi. 11b, xlv. 43a etc.

Utt. vi. 53c, ix. 28a

MP. 237.5

Its howl causes cessation  
of study till waking up the  
next morning, according to  
DS.

According to MP, its weep-  
ing with the face towards  
the sun, at sunrise, is  
supposed to portend fear.

Śṛgāla [Jackal]

*Canis aureus*. ( Indian

fox-vulpes bengalensis ).  
So called as it licks  
blood.

G XVI. 8

B I. 18. 18

MS. V. XI. 164. 199

Mbh. XII. 17.45

Ara. liv. 62a

Kis. xvi. 36b

Yud. lxxx. 68b

That it was looked upon as  
abominable can be inferrel  
from the DS rule that a  
Brāhmaṇa, who committed  
grave sins like the murder  
of a Brāhmaṇa, has to be  
branded with a mark resem-  
bling it on the forehead  
before banishment from his  
house.

Sṛmāra

A kind of animals frequ-  
enting damp places. Accord-  
ing some, *Bos Grunniens*  
(young deer).

Ara. xx. 24b

Utt. vi. 45b, xx. 19a

Stamberama (Same as Hastin)

R V. 72

Śūkara (Also Varāha)

Boar. Probably so called as  
it makes a sound like  
*Sū, Sū*.

RV. VII. 55.4 ; VIII. 77.10 ;

IX. 97.7, X. 86.4

YV. xxiv. 40

AV. ii. 27.2

*Sus scrofa*—Wild boar

G XVII. 27, XXII. 26,  
XXIII. 6

B I. 12.3, 6 ; III. 6.7

Ap I. 17.29, 21.15

Vas VI. 27 ; XIV. 47 ;

XXIII. 30 Vi. 80.8

Yud. xi. 38b, XV. 18a

According to A and B, the  
flesh of village *śūkaras* is  
not edible. Contact with  
it is supposed to defile  
things. V (XIV. 47) appears  
to refer to the existence of  
difference of opinion on the  
edibility of the flesh of a  
boar not living in the village.

Surabhi

Cow. *Bos indicas*.

Ayo. lxxxi. 17a, c. 55a

Ara. xx. 23a, 28a

Utt. xxvii. 20b

Śvan (Also Kauleyaka)

Dog.

Lit. it means that which  
can smell from afar or  
which eats impure things.

*Canis familiaris*.

RV II. 39.4 ; IV. 18.13 ;

VII. 55.5 ; VIII. 46.28 ;

IX. 101.1, 13 ; X. 86.4

KS II. 6.41

S.B. 6.5.2.19

G I.64 ; XIV. 30 ; XV. 24 ;

XVI. 8 ; XXII. 14, 21

B I. 6.4, 9.2, 11.34, 37, 39,

14.15 ; II. 6.34 : III. 6.7

Ap. I. 10.19, 15.16, 16.30,

21.15, 28.21 ; II. 17.20

Vas III. 45 ; XI. 9 ; XXI.  
 24 ; XXIII. 29, 30, 31, 33.  
 Vi. 81.7  
 Pan IV. 2.96, 4.11  
 MS XI. 131.199, VIII. 239  
 YS III. 5.277  
 A VI. p. 186  
 K XV. 24, 41  
 Ayo. Ixxii. 24b  
 Sun. xxiii. 32b  
 Utt. vii. 21a, Ixii. 14b, etc.  
 Vp. 78.38-40  
 Its touch, according to DS,  
 is supposed to defile not  
 only places and articles,  
 but also men. Considered  
 to be pure in a hunting  
 excursion.  
 Its skin is to be worn for  
 expiating the sin of the  
 destruction of *bhrūṇa*  
 (foetus).  
 The sight of *Śrāddha* by it  
 is condemned. Food for  
 dogs must be given on bare  
 ground, not in any utensil.  
 The *prāyaścitta* for killing  
 it is the same as that for  
 killing a cat.  
 According to Kālidāsa,  
 used by hunters in hunting  
 animals.

Śvāpada  
 Beast in general, usually  
 wild beast.  
 G XXIII. 5  
 Ayo. cvi. 27b, cxii. 7b  
 Ara. xxx. 32a

Sun. xvi. 55b  
 Śvāviṭ (Śvāvit)  
 According to commen-  
 tators, owl or an animal  
 resembling a dog or a kind  
 of boar.  
 G XVII. 25  
 B I. 12.5  
 Ap. I. 17.37  
 Vas XIV. 39  
 One of the five-toed animals  
 whose flesh can be eaten.

Śvāvidh  
 MS V. 18

Śveta Go  
 White cow ?  
 KS VII. 2.39

Tarakṣu  
 Hyena. *Hyaena hyaena*  
 Ayo C iii. 7a  
 Ara I iii. 42b  
 Sun xviii. 33a  
 MP 118.57

Turaga (Same as Aśva)  
 Adi xi. 14b, xli. 15b, etc.  
 Ayo xxvi. 199, xlii. 25a, etc.  
 Ara xxix. 2a, xxix 32a.  
 Yud xviii. 53, xxix. 20a, etc.  
 Utt xlix. 2a, 12b.  
 KS II. 6. 41, II. 7. 33

Turaṅga (Same as Aśva)  
 A I. 28, II. p. 57  
 Mal. V. 91  
 R I. 42, III. 38, 39, 46, 51.  
 VII. 37, 47, 70, IX. 51,  
 53, 67, 72, 76. XIII. 3,  
 61. XIV. 47. XVI. 30  
 K XIV. 20, 40, 42, 43 ;

XV. 23, XVI. 2, 36, 40,  
42 ; XVII. 30, 31  
Turamgama (See Turaga, Aśva)  
Ādi xiii. 1a.  
Ayo xliii. 15a, 16a.  
Sun Xlii. 39, Iiii. 12b.  
Yud xix. 12a, xxxv. 1b, etc.  
Ukṣan (Same as Vṛṣa) *Bos*  
*indicus*  
Ayo—ix. 45b  
R VI. 72  
Uptakṣaka  
Utt xxxi. 23a  
(1) *Ovis ammon*  
(2) *O. orientalis*  
Urabhra (Same as Meṣa)  
Sheep  
MP 118. 59  
Uṣṭra (Also Karabha)  
*Camelus* sp  
Camel (1) *Camelus dromedarius* (One-humped Arabian camel)  
(2) *Camelus bactrianus* (Two-humped Bactrian camel of Central Asia)  
RV VIII 6. 48  
SB I. 2. 39  
G XII. 20 ; XVII. 22 ;  
XXIII. 5  
Ap I. 17. 23, 29  
B I. 12. 11  
Vas XIV. 40  
Pan IV. 2. 39, 3.157  
V 2. 79  
VI 2. 40  
Ayo—Ixxii. 25b, C. 55a, etc.  
Sun—xviii. 30, xxvii. 18b, etc.

Yud—xxxv. 15b, liv. 25a, etc.  
Utt—vi. 44b, xxxiii. 37a, etc.  
MSV 8, 18  
VIII 146, 239  
XI 137, 154, 199  
YS I. 7. 170  
II 10. 160  
III 5. 273, 277  
RV 32  
VP 9. 42-44, 78. 17  
Its milk and flesh are prohibited, according to DS.  
Its milk is a taboo in Śrāddha, according to VP.  
That a young camel was chained is known from Pan. V. 2. 79. Pan. VI. 2. 40 clearly refers to camel-riding and to the mixed corps of camels and mules. From Pan IV. 3. 157 it appears that certain articles used to be made of parts of a camel's carcass. Among such articles were large and small sacks (*goṇī, goṇitarī*—V. 3. 90) made of camel's hairs, and big or small jars (*kutū, kutupa* V. 3. 89) made of the hide and intestinal integuments of camels.  
Used as a draught animal, according to Kālidāsa  
Vaḍavā (Also Vaḍava, a stud or coection of mares)  
Mare  
Pan. II. 4. 27

KS II. 6. 21

II. 8. 33

Ayo lxvii. 23b

Kis xl. 49b, 50b

Yud ix. 3b

Vāha (Same as Aśva)

RV 73, XIV. 52

Vājin (Same as Aśva)

A I. p.p. 18, 20, 24

Mal V. p. 91

R III. 43, IV. 25, VI. 33,

IX. 56

K XIV. 33, 34; XVI. 25,

41, 42, 44

Ādi vi. 2b, xi. 11b, etc.

Utt xix. 10a, xlii. 28b, etc.

Ayo xii. 34a, xiii. 23a, etc.

Kis i. 13a, xliii. 31b

Sun xxvii. 20a, xli. 3b,  
etc.

Yud ix. 23a, xi. 43b, etc.

Ara ix. 5a, xx. 29a, etc.

Vāmi

Mare, according to Malli-  
nātha.

RV 32

Used as a draught animal.

Vānara (Also Kapi)

Monkey. A common spe-  
cies is (1) *Macaca mullatta*  
(2) Hoolock—*Hylobates* sp  
hoolock. Hanūmān or  
Common Langur—(3) *Pres-  
tytis entellus*

RV I. 65. 8

MS I. 39; XI. 154, 135

KS IV. 1. 33

YS III. 5. 277

VP 69. 208

R XII 71, XVI. 19

Mal IV. p. 77

Ādi i. 64b, 66b, etc.

Ayo liv. 30a, Civ. 19b, etc.

Ara xx. 26a, lxi. 5b, etc.

Kis i; 3b, ii. 2a; iii. 2a, etc.

Sun i. 3a, 12b, ii. 2a, etc.

Yud i. 2a, 5a; ii. 8a, etc.

Utt xvi. 16b, xxiii. 4a, etc.

Vanaukas lit, living in a  
forest.

Kis i. 16a, xvii. 50a, etc.

Sun i. 84a. iii. 8b

Yud i. 44a, ii. 13a, etc.

Varāha

Sometimes prefixed by Viṭ

(Same as Śūkara)

Indian wild boar—*Sus scrofa*.

The etymological meaning,  
according to some, is that  
which digs earth for getting  
its favourite roots, etc.

RV i. 61. 7

G XXII. 26

B I. 12. 6

Vi 80. 8

MS V. 14, 19

VIII. 239

XI. 134, 154, 199

KS II. 6. 41, II. 8. 20

YS I. 7. 176

III. 5. 273

A II. p.p. 56, 65

K VIII. 35

R II. 17, IX. 59, 60

RS I. 17

Ādi xxvii. 13b



- Ayo xiii. 7a, xxv. 33a, etc.  
 Ara xv. 4b, xxxiv. 32b  
 VP 209. 23  
 Kis i. 13a, xliii. 31b  
 Sun xv. 40a, xviii. 29a  
 Yud xv. 18a, xxxvii. 31a, etc.  
 Utt vi. 45b, xxxvi. 39b  
 One of the two-hoofed  
 beasts whose flesh can be  
 eaten, according to DS.  
 Described by Kālidāsa as  
 feeding on *Mustā* grass in  
 muddy pools. Big ones  
 described as having tusks  
 and digging earth with  
 sharp hoofs.
- Vāraṇa (Same as Hastin)  
 K VIII. 24, XVI. 22  
 Kis. xxix. 13a, xI. 16a, etc.  
 Ayo. xxviii. 11b, xlvii. 3b,  
 etc.  
 Sun. Ivi. 28a, Ixxiv. 8b, etc.  
 Yud. xxxvi. 27a  
 Utt. vi. 44a
- Vasta (Same as Chāga)  
 G I. 18  
 Ap. 1. 3. 6  
 Vas XI. 63. XXI. 23  
 Its skin is to be worn by a  
 Vaiśya Brahmachārin as an  
 upper garment.
- Vehat  
 According to the *Kāśikā* on  
 Pan. II. 1. 65, a cow that  
 miscarries.  
 Its gift is a part of the  
 expiation for killing a cow.  
 Vas XXI. 22
- Viṭ  
 Vi. 81. 8
- Vṛka  
 Wolf. *Canis lupus*  
 RV. I. 105. 7, 11, 18. II. 28.  
 10, 34.9 VI. 51. 6, 14.  
 VIII. 34. 3, 56. 2. X. 73.  
 3, 95. 14, 127. 6, 133.4  
 S. B. 5. 1. 5. 22  
 B III. 3. 6  
 Pan V. 4. 41  
 MS. VIII. 235, 236  
 Ayo. cvi. 29d  
 Yud. xxvii. 28a
- Vṛṣa (Vṛṣabha)  
 Bull. *Bos Indicus*  
 RV. III. 52.5 ; IV. 41. 5 ;  
 VI. 46. 4  
 Also at many other places.  
 KS. II. 6. 39, II. 8. 20  
 K VI. 29  
 R II. 35, XI. 44.  
 Ādi. iii. 130a, xxxviii. 9b  
 Ayo. Ixi. 14a  
 Sun. xi. 3b, xv. 27b, xc. 8a  
 Yud. xi. 28b, cxiii. 82b  
 Utt. xxi. 52a, xcvi. 12ab  
 Ara. Ixxvi. 26a
- Vṛṣa-damśaka  
 An epithet of cat. So called  
 as it bites *vṛṣa* which  
 denotes, among others,  
 rat.  
 Śukla Yv. xxiv. 31
- Vyāghra (Also Śārdūla)  
 Tiger. *Panthera tigris*.  
 S. B. 12. 7. 1. 8  
 T. B. 1. 7. 8. 1

KS. II. 6. 41, V. 5. 16

B III. 3. 6

Pan II. 1. 56

R IX. 63, XII. 37, XVI. 15

Ādi. xxvii. 14b, xli. 20b,

xliii. 17b

Ayo. ix. 45b, xxix. 4a, etc.

Ara. ix. 24a, xx. 26b, etc.

Kis. i. 13a, iii. 5a, etc.

Sun. I. 33b

Yud. iii. 39a, xix. 61b,  
etc.

Utt. vi. 45b, vii. 20b, etc.

MP. 118-56



## BIRDS

### Ambujā

Aquatic animal (lit. born in water).

Utt. iv. 186

### Aṇḍaja

Bird (lit. egg-born).

Adi ii. 15a

Ayo lxvi. 2b

Kis xliv. 87c

Yud lix. 30a

Utt xxiii. 21b. lxiv. 43a

### Antarikṣa-cara

Moving in the sky ; bird.

Ādi xiii. 29b

Anyapuṣṭa (same as Kokila q.v.) *Eudynamis scolopacea*

K I. 45

RS VI. 25

Anyabhṛta (same as Kokila)

R VIII. 59, IX. 34

### Baka

The Cattle Egret, heron.

(1) Purple heron (*Ardea purpurea*)

(2) Grey heron (*Ardea cinerea*) (The Common heron)

(3) *Bubulcus ibis* (The Cattle Egret)

G XVII. 32

Vas XIV. 48

MS V. 14

XI 135

Ys. I. 7. 173

One of the birds whose flesh cannot be eaten.

Ayo. lxv. 14b

Yud. lxxxiii. 71b

VP. 69.326, 336

MP. 118.51

### Balākā

It is not the same as Baka, as some think. It is the Common Teal, *Nettion Crecca*

YV. 24.22

G XVII. 32

Vs XIV. 48

MS V. 14

XI 135

Ys. I. 7. 173

Me. 10

RS III. 12

Ara. lxxviii. 15a

Yud. lxxxiii. 71b, xci. 25a, xciii 48a

Barhiṇa (same as Mayūra)

*Pavo cristatus*

B I. 19.8

Ap I. 25. 14

MS XI. 135

V III. 2, IV. 20, 22

K VIII. 36

R II. 17, XVI. 14, 64 ; XIX.

37

RS. II. 6

Ayo xlix. 3a. lxv. 14b, cii.  
18a

Ara viii. 4a, xxvi. 22a, liv. 64b

Sun xvii. 10b, liii. 13a

Yud xv. 9a, xlv. 105a, etc.

Utt I, 22b

MP 153·116, 219·22

The *prāyaścitta* for killing  
it is the same as that for  
murdering a Śūdra

Bharadvāja

Skylark. The little skylark,  
*Alauda gulgula*

Ara lxxx. 23b

MP 118·30

Bhāsa.

The white-backed vulture,  
*Gyps bengalensis*

According to Haradatta,  
the commentator, a kind of  
vulture with wide beaks.

B 1. 19. 8

Ap 1. 17. 35, 25. 14

Vas XIV. 48 ; XXIII. 30

KS VII. 1. 34

YS III. 5. 272

MS XI. 135

Ara XX. 19a

Its flesh is prohibited as  
food. The *prāyaścitta* for  
killing it is the same as that  
for murdering a Śūdra.

Bhūliṅga

A kind of bird dwelling on  
the ground.

MP 118·54

Cakora

Greek partridge.

(1) *Alectoris graeca chukar*  
(The Chukar)

(2) *Perdix rufa*.

R VI. 59, VII. 25

VP 36.1-5

MP 161·67, 219·18

According to MP (219·18),  
its eyes roll at the sight  
of poison.

Cakravāka

The genus '*Casarca*' has  
now been changed to  
'*Tadorna*'. Hence the  
correct name is *Todorna*  
*ferruginea* (The ruddy  
sheldrake or Brahminy  
Duck).

RV II. 39·3

G XVII. 26

B 1.19.8

AP 1.17.35, 25.14

Vas XIV. 48

Its flesh is prohibited as  
food. The sin for killing  
it is the same as that for  
killing a Bhāsa (q.v.)

Ara XV. 3a, XX. 20b, etc.

Kis XIII. 86, XXIX. 19a, etc.

Sun XIV. 38b, XVII. 25b,  
etc.

Yud lxxvi. 38b, lxxxiii. 71a

Utt XX. 20a, XIV. 14c, etc.

MS V. 12

YS I. 7.173

Mc 84

K V. 26, VII. 15, VIII. 32,  
51, 61  
RXV. 30  
A IV. p. 141  
V IV. 34, 36  
VP 69. 337-9, 45-19  
MP. 20-17, 118-51, 161-53,  
180-27, etc.

Male *Cakravākas* are supposed to be separated by nightfall from their females and to mourn the separation throughout the night. Described as living in tanks or river-banks, and feeding on lotus-fibres.

#### Cāṣa

(Blue Jay) *Coracias benghalensis*  
RV X. 97.13  
MS XI. 131  
YS I. 7.175  
MP 118-55  
Vas XIV. 48  
KS II. 8.29, VII. 1.42-43  
Its flesh cannot be eaten.

#### Cātaka

Sparrow. *Passer domesticus*  
Pied crested cuckoo  
*Clamator jacobinus*  
Pan IV. I. 128  
Me. 10, 119  
K VI. 27  
R V. 17, XVII. 60  
A VII. 7  
Mal. II. p. 29  
RS. II. 3  
MP 154.388

Described as flying near clouds and subsisting on rain-water.

#### Dārvāghāṭa

Probably wood-pecker.  
*Dinopium bengalensis*  
Vas XIV. 48  
Its flesh cannot be eaten.

#### Dātyūha

Gallinule (Moorhen)—  
*Gallinula chloropus*  
Ayo Liv. 42a, Ivi. 12a, etc.  
Ara IXXXI. 11b  
Kis XIII. 8b, XXVI. 5a  
Yud XV. 9a, 11b  
Utt XIV. 14b  
KS II. 7.8  
MS V. 12  
YS I. 7.172  
MP 118.55

#### Dhārtarāstra

A kind of swan whose body is white and beak black.  
MP 118.51, 161-53  
(1) *Cygnus cygnus* (Whooper Swan)  
(2) *Cygnus columbianus* (Whistling Swan)

#### Dhvāṅkṣa (Same as Kāka)

Pan II. I. 42

#### Dvija

Bird or any oviparous animal, appearing first as an egg.  
Ādi LVI. 10a  
Ayo IV. 14b, IXXIII. 14c  
Ara LIX. 39, IXXVIII. 6a  
Kis IX. 24b, xli. 9a, lvii. 2a

Sun IV. 5a, XIII. 12ab, etc.

Yud II. 266, XI. 43a, etc.

Utt XXXIX. 6b, IXIV. 2a

#### Garuda (Garutmat)

It approaches very near to the (1) *Golden Eagle* which feeds, among others, also on serpents. The large (2) *Himalayan Griffon Vulture* has also been referred to in this connection, but the vultures do not feed on serpents. However, the scientific names of both the types are given below :

(1) Golden Eagle—*Aquila chrysaetos*

(2) Himalayan Griffon Vulture—*Gyps himalayensis*  
A huge fabulous bird supposed to be the lord of birds and feeding on serpents.

Ādi XIII. 286

Ayo XII. 23a

Ara XX. 33b, XXXVI. 6b

Kis X. 6b, lix. 17a

Sun i. 32b, iii. 59a, etc.

Yud XXVI. 10b, XXXVII. 2a, etc.

Utt VI. 45a, VII. 39a, etc.

R XI. 27, 59

VP 69.328-38, 97.22, 24.80, etc.

#### Gṛdhra

Vulture known as Pharaoh's chicken.

(1) *Neophron perenopterus*

(Egyptian or Scavenger vulture)

(2) *Gyps bengalensis* (Bengal vulture or white-backed vulture)

(3) *Gyps indicus* (Long-billed vulture)

G XVII. 27

Vas XIV. 48 ; XXIII. 30

Ādi I. 58b, III. 72b, etc.

Ayo XCI. 18a

Ara VII. 2b, XX. 1b, etc.

Kis XIX, 20, IVII. 1b, etc.

Sun i. 1a, XVI. 26b, etc.

Yud XI. 35b, XVI. 11a, etc.

Utt VI. 52, XXXVI. 42a, etc.

A VI. p. 186

VV 8. 15

Mal II. p. 32

R XI. 26, XII. 50, 54

K XV. 29

VP 30. 170, 19.6, 40.21-22

MP 39.6, 94.6

Stated to be carnivorous.

Its flesh cannot be eaten.

According to VP (19.6), if it touches the head of a person, he is sure to die within six months. According to MP. ; it pricks those who are doomed to Bhauma hell (39.6). It is the vehicle of Saturn (MP. 94.6).

#### Hamsa

Swan, Goose. (1) Grey leg goose (*Anser anser*). (2) Bar-headed goose (*Anser*

*indicus*). Both the species are referred to.

RV II. 34.5 III. 53. 10

IV 40.5 ; 45.4

V 78. 1, 2

VII 59. 7

IX 32. 3, 97.8

X 124. 9

YV XIX. 74

KS II. 7. 8, 21

SB 6. 7. 3. 11

G XVII. 26

B I. 19. 8

Ap. I. 17. 35, 25.14

Vas XIV. 48

MS V. 12

XI. 135

YS I. 7. 172

III 5. 272

Me 23, 59, 70, 81

K I. 30, XIII. 27, 39 ; XIV. 35, XVII. 27

R IV. 19, VIII. 59, XVI. 33, 56 ; XVII. 25, XIX. 40

V IV. 2. 3, 4, 6, 20, etc.

A VI. 17, 28

Mal II, 12

RS I. 5, III. 1, 2, 8, 11, 13, 16, 17, 24, 25 ; IV. 4

Ādi. xxxvii. 8a, xIv. 19b

Ayo. xxvii. 18a, xIiii. 22b, etc.

Ara. vii. 3a, xv. 6b, etc.

Kis. xiii. 8a, xxix. 16b, etc.

Sun. ix. 9a, xi. 2b, etc.

Yud. xlix. 22b, Ixv. 25b, etc.

Utt. xviii. 5b, xx. 20a, etc.

VP. 41.70,

MP. 11.51, 116.4, 118.50, 161.54, 171.41

Its flesh is prohibited as food. The *prāyaścitta* for killing it is the same as that for murdering a Śūdra. Described as flocking to the Ganges in autumn, and flying to Mānasa lake in the rains through a passage in the Krauñca hill. The ideal gait of a woman is compared to that of a swan. Supposed to lie hidden in sandy banks of rivers and to feed on lotus-fibres. Supposed to have the capacity for separating milk from water when the two substances are mixed up. One's fame is compared to the whiteness of the swan. A white bed-sheet is compared to a swan. Cries of a swan are sometimes compared with the jingling of anklets.

Hārīta

Haritāla or green pigeon.

*Treron phoenicoptera*.

V XIV. 48

KS. 7. 8

R. IV. 46

Its flesh is prohibited as food.

Described as moving about in the gardens of *marica* or black pepper.



Jala-kukkubha

Aquatic bird—may be belonging to the group of Divers and Waders. *Parra jacana* or *P. goensis*.

Ayo Ivi. 12b

Utt XX. 20a

Kis XIII. 8a, Ii. 12a

Jala-kukkuṭa

Water fowl (1) *Gallinula cinerea* (Kora or water-hen) (2) *Gallinula chloropus* (Indian Moor hen)

Kis. xiii. 8a, Ii. 12a

Jālapāda (Same as Haṃsa)

G XVII. 33

Vas XIV. 48

Its flesh can be eaten.

Jivajivaka (Same as Cakora)

MP. 118.52, 161.67, 219.21

On seeing it the effect of poison is said to be counteracted (118.52).

Kādamba (Same as Haṃsa)

According to Mallinātha, *nīlahamṣa*

R XIII. 55

RS III. 8; IV. 9

Kāka

Crow. (1) *Corvus splendens* (*Pātikāk* in Bengali) (2) *Corvus macrohynchus* (*Dāñḍkāk* in Bengali)

G XVII. 27; XII. 21

B I. 19. 8; III. 6. 7

Vas XXIII. 30

Ayo CV. 40a, 41a, etc.

Ara IV. 37a

Sun XXVII. 34b, XXXVI. 35b, etc.

Yud XXXVI. 42a

MS XI. 131, 154, 159

MP 237. 10

The *prāyaścitta* for killing it is the same as that for murdering a Śūdra.

Its touch is supposed to defile articles. Its flesh cannot be eaten. Its cohabitation forebodes the death of a king or the downfall of a country (MP).

Kākola

Raven. *Corvus corax*.

MS V. 14

YS I. 7. 174

Kala-hamṣa (See Haṃsa)

Kis XXIX. 18a, Ii. 12c

Kalāpin (Same as Mayūra)

*Pavo cristatus*

R VI. 9, 51

RS I. 16

Kalaviṅka

*Passer sp*

According to Haradatta, commentator of the G., it denotes village sparrow

SB I. 6. 3. 4

G XVII. 26

Vas XIV. 48

MS V. 12

YS I. 7. 174

MP 118. 49, 54

Its flesh is forbidden.

Kaṅka

Purple heron. *Ardea purpurea*

- G XVII. 27  
 Vas XIV. 48 ; XXIII. 30  
 R II. 31  
 Kis Ixii. 56  
 Sun vii. 22a  
 Yud xvi. 11a, Ixiv. 20a, etc.  
 MP 39.4, 153.176  
 Its feathers are stated to have been attached to the roots of arrows.
- Kapiñjala  
 Heath-cock, francoline partridge, according to Monier Williams. *Francolinus francolinus* (The Indian black partridge)  
 SB 1. 6. 33, 13. 5. 1. 13  
 B I. 12. 7  
 MP 118. 54  
 Its flesh is edible.
- Kapota (Same as Pārāvata q.v.)  
 RV 1. 30. 4  
 B I. 12. 7  
 Vas XIV. 48  
 Ayo XI. 4a  
 Kis XIII. 22b  
 Utt VI. 53a  
 Sun XCIII. 4a, 5b  
 Mal IV. 76  
 VP 30. 241  
 MP 237. 6  
 Its flesh is permitted as food (B). A *pāṇḍu-kapota* is prohibited (V).
- Kāraṇḍava (Kāraṇḍa)  
*Fulica atra*—It is a kind of Coot.  
 Ayo XXVII. 18a, Iii. 33a, etc.
- Ara VII. 3a, XII. 14b, etc.  
 Kis XXIX. 16b, XIiv. 30b  
 Sun IX. 9, XIV. 39a, etc.  
 Yud Ixxxiii. 71a  
 Utt Lxxxiv. 4b  
 KS II. 7. 8  
 Vas II. 22  
 RS III. 8  
 VP 41. 70  
 MP 161.53, 180.27, 219.20  
 Described as resting on a lotus at the bank after leaving the hot water. According to MP (219.20), it dies at the sight of poison.
- Kekin (Same as Mayūra)  
*Pavo cristatus*  
 K XIV. 35
- Khaga  
 Bird  
 Literally that which moves in the sky.  
 Ādi III. 37a  
 Ayo Xci. 16b, Xcvi. 30b, etc.  
 Ara XIII. 89, XXIX. 9b, etc.  
 Kis XIiv. 43, Iviii. 46 etc  
 Sun Ixix. 11a, xciii. 5a  
 Yud xxvii. 34. Ixxxiii. 90b  
 Utt VII. 21b
- Khañjariṭa (Khañjariṭaka)  
 Wagtail. Grey wagtail (*Motacilla cinerea*). Large Pied wagtail (*Motacilla* sp.)  
 There are several species of *Motacilla* in India, such as, *M. flava*, *M. citreola*, etc.

MP 118. 50

Vas XIV. 48

MS V. 14

YS I. 7. 174

Its flesh is prohibited.

#### Kikidivi

Blue jay, *Coracias benghalensis*

RV X 97. 13

Taittiriya Saṃhitā, V. 6. 22.1

Koka (Same as Kokila q.v. or Cakravāka q.v.)

Ara Iiii. 42b

Sun XXVI. 9b

Yud XXVIII. 18b

#### Kokila

Cuckoo. Koel. *Eudynamis scolopacea*

Vas XIV. 48

Adi IX. 15a, Ixvi. 6a, etc.

Ayo XLix. 2b, xcvi. 6b, etc.

Ara Ixxxi. 10b, 26b

Sun xvii. 8a, xviii. 9b, 20b

Yud XV. 10b

Utt XIV. 11b, Ixiv. 1b

V IV, 56

A VI. 4

Mal. III. 4

K III. 32, IV. 16, IX. 26

R XII. 39

RS VI. 14, 20, 21, 24, 27, 35

MP 118.49, 161.64, 219. 18, 237. 5

Its flesh is prohibited. According to MP (219. 18), its voice becomes unnatural at the sight of poison. Its cooing in *Hemanta*

(dewy season) portends fear (MP 237. 5)

#### Koyaṣṭika (Koyaṣṭi)

*Grus leucogeranus* (Siberian or great white crane)

A small white crane, commonly called paddy bird.

Ayo liv. 42a

Ara lxxx. 23a

Yud xv. 9a

MP 118. 50

Krauñca—(a) According to most ornithologists, (i) *Grus leucogeranus* (Siberian white crane) (ii) *Grus antigone* (Sarus Crane)

(b) According to some, Pond Heron or Paddy bird —*Ardeola grayii*

YV xxiv. 22

Ādi ii. 12b, 17b, etc.

Ayo cxi. 49b

Ara xx. 19a, xxii. 16b, etc.

Kis li. 11a, lix. 30a

Sun ix. 57a

Yud liv. 19a,

VP 54. 19-21

MP 118. 60, 219. 18

lxxi. 23b, lxxv. 18b

According to MP (219. 18), it gets intoxicated at the sight of poison.

#### Kravyāda

A kind of carnivorous bird. MP 237. 6-7

Its fall on the head portends the death of the master of

- the house. Its swoop at a portal, etc., forebodes the death of a king.
- Kukkuṭa**  
*Gallus domesticus*  
 Cock (The domestic fowl)  
 MP 118.53, 159.10, 217.21, 237.5  
 Its crowing in the evening is supposed to portend fear (MP 237. 5). It is recommended to be kept in a stable  
 VP 78. 38-40  
 Sun XV. 41b  
 It is a taboo in Śrāddha.
- Kuṃkumacūḍa**  
 A kind of bird with a saffron-like crest.  
 MP 118.74
- Kurara**  
 Osprey, a species of Eagle  
 —*Pandion haliaetus*  
 Kis xxix. 16a, 11, 11a, etc.  
 Yud XV. 11a  
 VP 69. 336  
 MP 118.50, 161.53
- Madanasārikā**  
 KS III. 3. 16
- Madgu**  
 Diver bird, according to Monier Williams, *Gavia* sp. order—Gaviformes  
 G XVII. 32  
 Vas XIV. 48  
 Its flesh is prohibited
- Māndhāla**  
 Flyin ox, according to Monier Williams. *Pteropus giganteus*—It is a kind of mammal.  
 G XVII. 32  
 Vas XIV. 48  
 Its flesh is prohibited
- Marāla**  
 A species of *Haṃsa* (q.v.)  
 K X. 33
- Maukuli**  
 Same as *Kāka*  
*Uttara-rāmacarita*, ii. 28
- Mayūra** (Also Barhin, Barhiṇa, Nīlakaṇṭha, Śikhin, Śikhaṇḍin, Sitāpāṅga, Śuklāpāṅga Kekiṇ, Kalāpin.  
*Pavo cristatus*  
 RV I. 191. 14  
 YV XXIV. 23  
 B I. 12. 7  
 KS IV. 1. 33, VII. 1. 34  
 VII. 2. 44  
 Pan II. 1. 72  
 IV. 3. 48  
 Ayo xlv. 11b  
 Ara xii. 15b, xxi. 13a, etc.  
 Kis xxix. 13a. xliii. 37a, etc.  
 Sun xii. 36b, xv. 41b  
 Utt xviii. 5a, 22a etc  
 Me 46  
 R III. 56, VI. 4, VII. 69, IX. 67, XIII. 27, XIV. 69, XVI. 14  
 V. II. 19. 3 ; IV. 71  
 A IV. p. 137 ; VII. p. p. 243, 241, 248  
 Mal I. 21  
 RS I. 13, III. 12

VP 54. 19-21

Its flesh is prohibited.

Described as having tail of golden colour, resting on a pole or stick in the house, dancing especially on hearing the rumbling of clouds. Some arrows are stated to have peacock's feather attached to them. The cry of a peacock is spoken of as resembling the *Ṣadja* or the first of the seven *svaras* of Indian music.

Naktamcara

Night-ranging birds like the owl. *Athene brama* (Spotted owl, the most familiar bird in this country)

G XVII. 32

Vas XIV. 48

Its flesh is prohibited.

Nicurdāru

Wood-pecker (?). *Dinopium bengalensis* (Wood-pecker)

G XVII. 33

Its flesh is prohibited.

Nilakanṭha (Same as Mayūra).

*Pavo cristatus*

Me 87

V IV. 13, 21

Nilakanṭhi

Pea-hen

Sun Xi. 23b.

Pakṣin

Bird (lit. that which has wings).

Ādi xiii. 30a, xxvii. 12b, etc.

Ayo xxxiii. 24a, xliii. 33b

Ara V. 5b, vi. 9a, etc.

Kis. xiii. 11a, xvii. 9b, etc.

Sun ii. 10b, iii. 39a, etc.

Yud iii. 35a, xi. 40b, etc.

Utt xviii. 31b, xx. 14a, etc.

Parabhṛta, Pārapuṣṭa

Same as Kokila. Lit. nourished by others.

Mal IV. 2, V. 1.

V IV. 12, 22. 3, 24.

A IV. 9, V. p. 174

K VI. 2

R IX. 43, 47

RS VI. 22, 28, 31, 34

KS II. 7. 8, III. 3. 16, IV. 1. 33

Ara lxxx. 29a

Ayo lvi. 13a

Yud xv. 9b

Pārāvata (Also Kapota)

Blue rock-pigeon. *Columba ivia*.

Vas XIV. 4. 8 ; XXIII. 30

KS II. 7. 8

Me 40

V III. 2

Mal II. 12

K IX. 1, X. 6

MP 118. 52

Its flesh cannot be eaten.

Described as resting on turrets of building or on house-tops.

Pataga

A bird.

Ādi iv. 53b, xliii. 16b

Ara xxiii. 8b, xl. 27a, etc.  
 Kis xlv. 25b, lxii. 38b,  
 lxiii. 11a  
 Sun. V. 32a, lxxxi. 2a  
 Yud. xvi. 86a, xxvi. 25b,  
 xlvi. 122a, etc.

#### Patattrin

Bird

Ara xxi. 21b  
 Kis li. 17b  
 Sun xliii. 18a  
 Yud lxiv. 20b  
 Utt xxviii. 24b, xxx.  
 24a

#### Patra-ratha

Using wings and vehicles.  
 Bird.  
 Kis xlv. 93a  
 Utt vii. 33b, xviii. 25b

#### Pika

Same as Kokila.  
 White Yu. 24.39

#### Pecaka

Owl—food usually constitutes land vertebrates like small mammals, some birds and invertebrates like arthropods. The following species may be mentioned :

- (1) *Athene brama* (spotted owl)
- (2) *Otus asio* (screech owl)
- (3) *Bubo* sp. (horned owl)
- (4) *Tyto* sp. (barn owl).

Yud XXVII. 31b

#### Plava

According to one commentator, a bird named

*Śakaṭābila*. According to another, a kind of *baka* (q.v.). According to Monier Williams, a kind of aquatic bird.

G XVII. 26

Ap 1. 17. 33

Vas XIV. 48

Ara lxxviii-7a, lxxxi.43a

Ayo cxi.49a

Kis li.12c

Sun lxxxv. 6b

MS V. 12

YS I. 7. 173

Its flesh is forbidden.

#### Priyamvada

A bird which has not been identified.

Ara lxxx. 23b

#### Pumskokila

Male cuckoo.

Ayo cxi.49b

#### Pūrṇamukha

A kind of bird not yet identified.

Ara xxx.23b

#### Putrapriya

A kind of bird not yet identified.

Ara lxxx.23b

MP 118.52

#### Railātaka

An unidentified bird.

Vas XIV. 48

Its flesh is prohibited.

Rājahaṃsa (A kind of *Haṃsa*, q.v.)

Me II

RV 75, VI. 26, XVI. 54  
 VI 18, IV. 30  
 RS III. 21  
 K IX. 34, XVII. 36  
**Rajjudālaka**  
 A kind of wild fowl.  
*Gallus* sp  
 YS I. 7. 174  
**Rajjuvāla**  
 Variant of Rajjudālaka  
 MS V. 12  
**Rakta-pāda** (Same as Pārāvata)  
 G XVII. 27  
 Its flesh is forbidden.  
**Rakta-tuṇḍa**  
 According to commentator,  
 birds like *Cakora* (q.v.).  
 G XVII. 27  
**Raktavartma**  
 A kind of bird which has  
 not been identified.  
 MP 118.53  
**Rathāṅga** (Same as Cakravāka)  
 V IV. 37  
 K III. 24, 37  
**Śakuni** (Sakuna)  
 A large bird ; a bird which  
 indicates omens.  
*Gyps bengalensis* (White-  
 backed vulture)  
*Gyps indicus* (Long-billed  
 vulture)  
 A. B.  
 S. B.  
 Ādi ii. 18b  
 Ara vii. 4a, lxxxi. 20a  
 Yud xiii. 8a, xv. 20b, lxxiv.  
 15b, lxxv. 38b, etc.

Utt V. 28b, xxi. 10a  
 VP 30. 260

#### Sāraṅga

According to Monier  
 Williams, it is the name  
 of various birds-peacock,  
 Indian cuckoo, *Rāja-*  
*haṁsa*, *Cātaka*, etc.

Vas XIV. 48

Ayo. lxv. 146, 16b

Kis xxix. 22b

Its flesh is prohibited.

#### Śarāri

Heron

*Ardea cinerea* (Gray heron,  
 the Common heron)

Ara XV. 6b

Sārāsa

A sort of crane

*Grus antigone* (Sarus Crane)

MS V. 12

YS I. 7. 172

Me 31

R I 41, XIII. 30, 33

Mal III. 6

RS III. 8, 16

Ādi xxxvii. 8a

Ayo xlvii. 3b, civ. 3a

Ara xv 3a, xx. 20b, etc.

Kis xiii. 8a, xxvi. 5a, etc.

Sun ix. 57a, xvii. 36b, xviii.  
 20b

Yud xv. 10b

Utt xx. 20b, xlv. 14b

MP 116.10, 161.53-54, 180.26

Its cry is supposed to be  
 melodious. Described  
 as flying in a row.

Sārikā

Vas XIV. 48

KS I. 4. 8., IV. 1. 33, VI. 1.

25

Common myna

*Acridotheres tristis*

MS V. 12

Me 90

Ayo liii. 24a

Sun XV. 35b

Yud xi 40a

Utt vi. 53a

MP 118.52, 161.67, 219.20

Its flesh is prohibited.

Described as being reared  
in a cage. It is said to  
vomit at the sight of  
poison (MP. 219.20).

Śikhaṇḍin (Same as Mayūra)

YS III. 5. 272

K I 15. VIII. 67

Śikhin (Same as Mayūra)

Me 34, 70

Mal II. 12

V 10

RS II. 14, 16 ; III. 13

Ayo lvi. 12a, lxx. 16b

Śitāṇḍaja (Same as Hamsa)

RS. III. 3

Śitāpāṅga (Same as Mayūra)

V. IV. 31

Stokaka

*Clamator jacobinus* (Pied  
crested cuckoo)

Ara. xxxv, 28b

Śuka

Parrot. VI. 1. 25

*Psittacula krameri*.

RV. I. 50.12

YV. xiii. 47

G XVII. 32

Vas XIV. 48

KS I. 4.8, II. 7.8, III. 3.16,

IV. 1.33, VI. 1.25.

MS V. 12

XI. 134

YS I. 7.172

III. 5.271

V II. 22, IV. 17

A I. 13, III. p. 100

R V. 74, XVII. 20

RS. VI. 20

Ayo. liii. 24b, 25a

Ara XX. 18a, 21a

Mbh. xii. 314.2

MP 118.51, 219.20, 257.13

Its flesh is forbidden.

Described as being kept in  
a cage and talking  
sweetly. It is said to  
scream at the sight of  
poison (MP 219.20). If  
a tree, cut down for  
building purposes, is  
found to be pearl white,  
it indicates fear from  
parrots (MP. 257.13).  
Green things and soft ones  
are often said to be like  
the parrot's belly. Stated  
as living in the hollow of  
a tree.

Śuklāpāṅga (Same as Mayūra)

Me 32

Suparṇa

According to Haradatta's



commentary on A., it is the same as Śyena (q.v.). Any large bird of prey—vulture, eagle, etc.

A. B.

S. B.

Ap. I. 17. 35

Ādi. iii. 108b, xliii. 16b, etc.

Ayo. xxv. 25a, cxvii. 9a, etc.

Ara. viii. 3a, xxxiii. 19b, etc.

Kis. i. 15a, xv. 25a, etc.

Sun. iii. 62a, v. 34b, etc.

Yud. xvi. 35b, xxvi. 17a, etc.

Utt. vi. 60a. xvi. 10a, etc.

Its flesh is prohibited.

Śyena

Hawk, falcon. *Falco peregrinator*.

RV I. 32.14 ; 33.2 ; 71.4 ; 80.2 ; 96.4

IV. 6. 10

VII. 63. 5

KS VII. 1. 34

Ayo. xlv. 5b

Ara. xx. 19b

Kis. lix. 30b

Yud. xvi. 11a, xxvii. 34a, lxvii. 22a

Utt. xv. 5a

MP 93.151

Occurs also at many other places.

The use of its bones is recommended in *Navagraha-homaśānti* (MP).

S. B. 12. 7. 1. 6

A. B.

G XVII. 27

Vas XIV. 48

B III. 3. 6

Pan. VI. 3.71

MS XI. 135

YS III. 5. 272

R VII. 46, XI. 60

K XVI. II, 27

Its flesh is prohibited.

Tirīṭaka

A kind of bird not yet identified.

Ara. lxxx. 23a

Ṭīṭibha

According to a commentator, the bird which makes the sound *ṭīṭibha*.

G XVII. 32

Vas XIV. 48.

MP. 118.51

Its flesh is prohibited.

Ṭīṭibhī (Feminine form of *Ṭīṭibha*)

Ayo viii. 41b.

Yud lxxxiii. 71b.

MS. V. 11.

YS. I. 7. 172.

Tittiri (Tittira)

Francoline partridge.

(i) *Francolinus* sp. (Grey partridge).

(ii) *Francolinus francolinus* (Black partridge).

B 1. 12. 7. Both the species are referred to.

S. B. 1. 6. 3. 5.

Ayo C. 66b.

MS. XI. 134.

YS. III. 5. 274.

- Its flesh is prohibited as food.
- Tiriṭaka**  
An identified bird.  
Ara LXXX. 23a
- Ulūka**  
Owl. (i) Great-horned owl—*Bubo bubo*.  
(ii) Spotted owl—*Athene brama*.  
Ap. 1. 10. 19.  
B 1. 19. 8.  
Vas XXIII. 30.  
Ayo—C XXV. 2a.  
Ara—XX. 19b.  
Utt—I xiv. 2b, 3a, etc.  
MS. XI. 131.  
MP. 131.29, 237.12  
Its screech, heard by a student engaged in study, causes cessation of study.  
Its hooting at the gate a house forebodes the death of a king, etc., and the destruction of wealth, etc., (MP. 237.12).  
Its flesh is prohibited. The *prāyaścitta* for killing it is the same as that for murdering a Śūdra.
- Vāja**  
An unidentified bird.  
S. B. 1. 6. 33, 13. 5. 1. 13.
- Vañjulaka (Vañjula)**  
A kind of bird not yet identified.  
Ara. lxxvi. 13a, lxxx. 23a  
Kis. xiii. 8a
- Vāraṇa**  
B 1. 12. 7.  
Its flesh is prohibited.
- Vārdhrāṇasa**  
According to Haradatta on A, a kind of bird having the nose resembling leather.  
B 1. 12. 7.  
Ap. II. 17. 3.  
Its flesh is permitted as food. According to A, its flesh is particularly gratifying to the Manes in *Śrāddha*.
- Vāyasa (Same as Kāka, q.v.)**  
B 1. 6. 4, 14. 15.  
Ap. 1. 25. 14.  
Vas XI. 9; XIV. 48.  
KS VI. 2. 70, 71.  
YS. III. 5. 277.  
Ayo. xci. 18a, cv. 55a  
Ara. liv. 64a, lxxxi. 23b  
Utt. xviii. 5a, 31a.  
Kis. xix. 20a  
Sun. xxxvi. 41a, lxvii. 29a, etc.  
Yud. lix. 29a, lxxvi. 38b  
Its touch defiles things. The *prāyaścitta* for killing it is the same as that for murdering a Śūdra. Its flesh is prohibited as food.
- Vihaga**  
Lit. moving in the sky; bird.  
Ayo. xlix. 2b, lii. 30a, etc.  
Ara. xvi. 6b, xxix. 13a, etc.  
Kis. xlv. 36b

Sun. iii. 59b, ix. 8b, etc.

Yud. xi. 39b, xv. 17a, etc.

### Vihāṅga

Same as Vihaga

Ayo. CV. 13a, 40b, cxxxv.

4a

Ara. lxxv. 2a, 19a, 30a

Kis. xxix. 22b

Sun. iv. 13b, xi. 17b, etc.

Yud. xv. 10a, xxxvii. 41b,

xliv. 43b

Utt. vi. 45a, xviii. 22b, etc.

### Viśālākṣa

A screech-owl.

*Otus* sp.

Utt. xxxi. 22a

### Viṣkīra

A class of birds which eat insects, corns, etc., after scratching the earth with their legs.

Pan VI. 1. 150.

## FISH AND OTHER AQUATIC CREATURES

N.B. Aquatic birds have been included in the list of birds.

### Aṇḍaja

Lit. born of eggs. The term denotes, *inter alia*, fish.

The following floating verse contains the names of some species of fish :

*rohite mohitaḥ putro,  
madguro madguroḥ priyaḥ |  
śākule ākulaḥ bhāryā kavayī  
mama jīvanam ||*

It means : My son is extremely fond of *Rohita*. *Madgura* is a favourite of my preceptor. My wife is eager for *Śākula*. *Kavayī* is my life.

*Rohita*—In Bengali *Rūi*

*Madgura*—In Bengali *Māgur*

*Śākula*—In Bengali *Siṅgi*

*Kavayī*—In Bengali *Kāi*

MS i. 44

### Baḍiśa

This word denotes here a kind of fish whose form is curved like a fish-hook. In that sense, *Notopterus Chitala* (*Cital* in Bengali) is very near the type referred to.

Note : In Telugu, Baḍishya means—*Chela baicala* (*Celā* in Bengali) which

is not only very small but its curvature is insignificant compared to *Notopterus chitala*.

MV 1390

### Bala

Cat-fish carrying eggs and young ones in the mouth.

(1) *Tachysurus arius*—Calcutta and other parts of W. Bengal, Orissa, Kerala, Bangladesh.

(2) *Tachysurus dussumieri*—Malabar, Kerala, Madras, W. Bengal.

### Barbara

Occurs in the *Rājanighaṇṭu*.

### Bhīruka

MV 1385

Occurs in the *Rājanighaṇṭu*.

### Bṛhacchiroromaśakarī

B 1. 12. 8

### Ceṭa

Vas XIV. 41

Ap. 1. 17. 38

It cannot be eaten.

### Chanvilocha

Hammer-headed shark.

*Sphyrna blochii*

*S. zygaena*

*S. tudes*

MV 1385

## Cilicima

B 1. 12. 8. Also in the *Rāja-nighaṇṭu* and *Nāma-īṅgānuśāsana*. According to Kṣīrasvāmin, commentator of the latter, it denotes Vālukā-matsya :

Edible.

## Dantapatala

Having tan-coloured teeth.  
*Eutropiichthys vacha*  
MV 1387

## Gaḍaka

Occurs in the *Rāja-nighaṇṭu*.

## Gagdhara

Crow-fish  
*Xenetodon cancila*  
MV 1388

## Gargara

Occurs in the *Rāja-nighaṇṭu*.  
It occurs in the RV. viii. 69.9 as an onomatopoeic word.

## Gavaya

Vas XIV. 41.  
Not edible.

## Gojjala

Living in shallow water.  
*Channa marulius*  
In Bengali *Gajār*.  
MV 1388

## Grāha

A rapacious animal living in fresh or sea water. Any large fish or marine animal, e.g. crocodile, shark, etc.

Adi xlii. 7b

Ayo IV. 4a

Kis xli. 21b, xlii. 48b

Sun Ixxiii. 12b, Ixxv. 28a, etc.

Yud Iiv. 25b

## Jalacara

Living in water.

Adi xlii. 29b

## Jalaja

Aquatic creature ; fish.  
Ayo Ixii. 32b

## Kacchapa

*Kachuga* sp. *Testudo* sp.  
*Trionyx* sp.

The term 'Kacchapa' refers to both turtles and tortoises. They belong to several genera, of which the genera—*Kachuga*, *Chelone* and *Trionyx* represent various turtles common in our country, whereas, *Testudo* represents the common Indian genus of tortoise.

G XVII. 25

B 1. 12. 5

Ap. 1. 17. 37

Vas XIV. 39.

Ara xli. 26a, 30b.

Kis li. 26a.

Sun Ixxx. 19b.

Utt vi. 45a, XC. 17a.

MS I. 44

YS I. 7. 177

Edible.

Kadamba

Kis xiii. 8a, xxvi. 5a, etc.  
Sun Iyi. 1b, xiv. 38a  
Utt XX. 20a

Kahlava

Playful.  
*Puntius carnaticus*  
MV 1390

Kambu

Conch  
*It is not a fish.* It refers  
to popular conch-shells  
having commercial as  
well as religious impor-  
tance in India. It is a  
Prosobranchiate Gas-  
tropod belonging to the  
*Phylum Mollusca.*  
Sun. xxxii. 10a  
Utt. xxviii. 42b, xxxi. 8b

Kañtakara

Thorny (Bony ?).  
*Plotosus* sp.  
In Bengali *Kānmāgur*.  
MV 1386

Kañtharaya

Having a beautiful neck.  
*Barilius bendelisis*  
MV 1389

Kaurattha

*Hilsa, ilisha*

Kavayi

MV 1393  
In Bengali *Kai*.

Kavikā

Both the above words  
occur in the *Rāja-nighaṇṭu*.  
The word appears to be

derived from *Ku + Vay +*  
*in* (to go). *Ku* has been  
variously explained as  
water, earth, etc.

Khandalipa

Drinking small drops.  
*Mastacembelus armatus*  
MV 1391

Khalamisā

Occur in the *Rāja-nighaṇṭu*.

Khirida

Coronets (In Bengali, the  
fish *Pāṅgās*.)  
*Pangasius pangasius*  
MV 1386

Kovakiya

*Polynemus tetradactylus*.  
(In Bengali, the fish *Tapse*.)  
MV 1396

Kovasaka

Living at bottom.  
*Mystus aor*—In Bengali, the  
fish *Āḍ*.  
*Mystus seenghala*—In  
Bengali, the fish *Ṭyānrā*.  
MV 1386

Kulira

Crab.  
Several genera are represen-  
ted in India, of which  
species of *cancer*, *Maia*,  
*Inachus*, *Portunus*, etc., are  
noteworthy.

Vas XIV. 41

Not edible.

Kumbhira

*Crocodylus* sp. Crocodile  
VP. 9.96

Kūrma (Same as Kacchapa, q.v.)

*Kachuga* sp.

S. B. 6. 1. 1. 12, 7. 5. 1. 1.

Ayo C XXV. 15a.

Kis xvi. 35b.

Sun XXV. 12b.

Yud Ixxiv. 12

MS V. 18

Madguru or Madgura

*Clarius batrachus*. In Bengali, *Māgur* fish.

Occurs in the *Rāja-nighaṇṭu*.

*Suśruta-saṃhitā* i. 46 and

MS. V. 13

VP. 11. 19, 93. 94

The derivative meaning seems to be this—that which sinks into mud.

Mahāśīta

Very cool-tempered.

South Indian Mahasser.

*Tor mussulah* or *Tor Khudree*

Both the species are applicable, though, *Tor mussulah* seems to be the type, as it is distributed in fresh water of S. India.

MV 1390

Makara

Crocodile, marine monster.

Short-snouted Crocodile

*Crocodylus porosus*

V IV. 54

K XIV. 9

Ayo. xIvii. 3a, C ii. 13b,

Cxxiv. 22a

Sun. ii. 11a, vii. 38a, etc.

Yud. Ixxviii. 6b, C ix. 15a

Utt. vi. 45a, vii. 3b, etc.

Gitā. x. 31

Manuṣya-śiras

Having head like that of a man.

Ap. I. 17.39

Not edible.

Marila

*Channa striatus* (*Ophicephalus*) *striatus*.

MV 1392

Matsya

Fish. The word originally denoted excessive greed.

RV VII. 18.6

x. 68.8

Pān IV. 4.35

Ayo liii. 39b, lxix. 47b, etc.

Ara xxviii. 29, xliii. 47b, etc.

Kis li. 26a

Sun lxxx. 19b

Yud lxxiv. 12a

Utt. xc. 17a

Mina

Fish

It also signifies that some fish "Kill small fish and other aquatic animals". According to some other authors, Mina is derived from a root which means 'Scattering or Splashing (water)'. In both the opinions, reference is made to the predatory

- habits of the Cat-fish.  
The common genera  
are—*Wallago*, *Mystus*,  
*Pangasius*, etc.  
The word denotes graceful  
gait.  
Yv. xxx. 16  
Ādi xiv. 18a  
Ayo ci. 41b, cxxv. 4b  
Ara xxix. 13a, lix. 40a  
Sun lv. 9b, lvi. 2a, etc.  
Yud cix. 17b  
Utt vi. 45a, vii. 7a, etc.  
MS. xi. 68  
Gītāgovinda i. 5  
According to commentator,  
Haradatta, it is the same  
as *Makara*.  
Ap I. 17.39  
Not edible.
- Nadaka**  
Tubular.  
*Puntius Curmuca*  
MV 1390
- Nakra**  
From the description it  
appears that it is either  
Sword-fish or Saw-fish  
(*Pristis* sp.)  
Yv xxiv. 35  
Vas XIV. 41  
Pān VI. 3. 75  
Ayo xxviii. 15a, xlvii. 3a,  
C xxiv. 22a.  
Ara xvii. 23a, xxvii. 9a, etc.  
Kis xvi. 36b, xlv. 53b  
Sun i. 2b, xviii. 29a, etc.  
Utt. xxi. 6a, 35C
- MS I. 44  
R VII. 30, XIII. 11, XVI.  
55, 79  
Not edible.
- Pallaka**  
It is a Telugu word which  
means the Red-fish,  
*Lutianus roseus*.  
Red fish.  
*Lutianus roseus*.  
MV 1390
- Pandimana**  
It is a Telugu word.  
White-fish.  
*Lates calcarifer*.  
MV 1389.
- Pāṭalapicchaka**  
Having tan-coloured tail  
fin.  
*Clupisoma garua*. In Bengali,  
*Khayrā* fish.  
MV 1387
- Pāṭhina**  
*Wallago attu*.  
In Bengali, *Voyāl* fish. Is  
it the same as *Vodāla*  
mentioned in Monier  
Williams' *Sanskrit-  
English* dictionary (on the  
authority of Sanskrit  
lexicographers ?)  
From Kullūka's commen-  
tary, it appears to have  
been a large fish preying  
upon the small ones.  
MS V. 16  
YS I. 7. 178  
MV 1386



Rājīva

Des ?

B I. 12. 8

MS V. 16

YS I. 7. 178

Edible.

Rakta-matsya

Occurs in the *Rāja-nighaṇṭu*.

Rohita

Pink-coloured. *Labeo fimbriatus*. Probably so called because of its reddish tinge. In Sanskrit, sometimes R and L are identical.

B I 12. 8

MS V. 16

Sahasra-damṣṭra

Lit. thousand-toothed.

Under Mbh. xii. 29.27, the commentator, Nilakaṇṭha, identifies it with *Ulkā* (q.v.) fish.

B I. 12.8

YS I. 7. 177.

A VI. p.p. 184, 206.

M 1391

Edible and appears to have been sold in the market. The word *Rohit*, occurring in the RV. (vii. 42.2), denotes the bright reddish colour of the sun. The word *Rohita* occurs in the *Rāja-nighaṇṭu* also.

Śakula—Occurs in the *Rāja-nighaṇṭu*. *Heteropneustes fossilis*. A kind of catfish. In Bengali, *Singi fish*.

In the YV, it means "possessed of great strength."

Śukla YV. xxiii. 28

Ara lxxviii. 9a

Śāla—Occurs in the *Rāja-nighaṇṭu*. *Channa striatus*.

Śaṃkha

Same as *Kambu* (q.v.).

Ara xx. 27b

Kis xxviii. 33a, xxxlx. 19a, xliii. 32b

Sun ix. 12a, xi. 2a, etc.

Yud xix. 14b, xxvi. 42b, etc.

Utt vii. 9b, xxiii. 7a, etc.

Śaṃkucaka

Contracting. *Dasyatis marginatus*. In Bengali, *Śaṅkar* fish.

MV 1386

Śalyakā

Scaly fish.

Yud XXV. 18b

Śaphara (Śapharī)

A kind of bright little fish that glistens when darting about in shallow water (M. Williams).

Described as jumping out of water, and as being distressed at the drying up of the lake.

It may be either of the following genera—

*Danio*, *Barilius*, *Chela*.

Me. 42.

K IV. 39.

G XIII. 3.

RS III. 3.

Sarpaśīrṣa (or śīrṣi)

Serpent-headed.

Vas XIV. 42.

Ap. I. 17. 39.

Not edible.

Śaphari

RV I. 116.7

(Etymological meaning according to Sāyaṇa—that which, even though lying down, moves.)

Sarpa

Serpent.

Ādi xli. 22a

Ayo vi. 21a, xxviii. 9a, etc.

Ara xxxv. 4b, xxxix. 6b,

lvii. 27a

Kis xv. 15b, xxxiv. 23b, xli.

53a, 54b

Sun iv. 12a, v. 13a, xxiii.

22a, etc.

Yud xv. 15a, xvi. 30b, etc.

Utt vii. 21b, xxiii. 21b,

etc.

Sarīśpa

Reptile, snake.

Ādi xiii. 30c.

Ayo xxv. 32b, xxviii. 9a,

lviii. 6b

Kis lx. 15a

Sun xxxiv. 17a, lxxviii.

16b

Utt xxvi. 26c, lxiv. 42b

Śatabali

According to commentator, Haradatta, it is called *Rohita*, and has innumerable scales.

*Labeo rohita*

In Bengali, *Rūi* fish.

Ap II. 17. 2

Served to a Brāhmaṇa invitee, it is supposed to be very gratifying to the Manes in a *Śrāddha*.

See Kambu.

Simhatuṇḍa

Lion-faced.

*Bagarius bagarius*. In Bengali *Bāgāḍ* fish.

MS V. 16

YS I. 7. 177

MV 1386

Śīsumāra

Gangetic porpoise or dolphin (M. Williams). Probably so called as it is believed to kill or devour its young ones.

Vas XIV. 41

Bhāgavata Purāṇa V. 23. 4

Sun xxvii. 18a

Utt vi. 44b, xxxvi. 39, xlv.

18a

Mbh. i. 185. 16 ; xii. 29.27

Not edible.

Sora

Shark. *Carcharhinus gangeticus*.

MV 1385

Śṛṅgasora

Shark with horn. Saw-fish.

*Pristis cuspidatus*.

MV 1385

Śṛṅgi

Occurs in the *Rāja-nighaṇṭu*.

**Svarṇamīna**

Gold-coloured. In Bengali,  
*Sarpunṭi*.  
*Puntius Sarana*  
 MV 1391

**Timi**

Whale. Lit. that whose whole  
 body is wet (with oil ?)  
*Balaenoptera*. sp.  
 Ayo 81. 16  
 Ara xvii. 23a, Ixi. 18a  
 Kis xliii. 14C  
 Sun 1. 2b, XXXV. 42a  
 Utt vii. 7a  
 R XIII. 10  
 MP 133.70

**Timiṅgila**

An aquatic creature. Lit.  
 that which devours  
*Timi*.  
 MP 133.70

**Tomara**

Gar fish, lance-shaped.  
*Belone annulata*  
 MV 1390

**Tumbaya**

Gourd-shaped. In Bengali,  
*Bele* fish.  
*Glossogobius giuris*  
 MV 1392

**Ulkā : Same as Śiśumāra (q.v.)****Vaisarina**

Pān V. 4.16

**Varmi**

B 1. 12.8  
 Edible.

**Varṣābhū**

Pān. VI. 4.84

**Vidruva**

Lit. nimble.  
 It may be any of the  
 following species :

- (1) *Chela* sp.
- (2) *Rasbora* sp.
- (3) *Danio* sp.

MV 1388

**Visāra**

Swift-moving fish.  
 RV. i. 79.1  
 Pān. iii. 3.17

## INSECTS AND OTHER SMALL CREATURES

### Ākhu

Mouse

*Mus booduga*

MS XI 159

### Ali

Bee

*Apis* sp.

MP 131.50

Swarms of bees are stated to destroy crops.

### Bheka

Frog

MP. 257.13

A tree cut down for building purposes, if found like madder, indicates fear from frogs.

### Bhramara

Bee

*Apis* sp.

Pān. IV. 3.119

Ayo. lvi. 13b, cxxv. 9a

Ara. lxviii. 16a, lxxxi.

17a

Kis. xlix. 14b, li. 30b

MP 39.6, 19, 161.63, 250.11

Sun. xiv. 24b, xviii. 16b, xxii. 35a

Yud. iii. 34a, xv. 10a

Utt. xlv. 11a VP. 70.64, 36.1-5, etc.

### Bhr̥garāja

Bee-king. Species of a large bee.

*Apis* sp.

Ayo. CV. 12a

Ara. lxxxi. 13a

Sun. xvii. 9a, xviii. 20b

Yud. xv. 11a

Utt. xlv. 11b

MP. 219.18

According to MP., it hums at the sight of poison.

### Damśa

Gad-fly.

RV I. 162.9

MP 250.11

MS I. 40, 45

### Cillika

Female of a cricket.

*Gryllus domesticus* (The house cricket).

Ādi, xxvii. 12b

### Jhillika

Female of a cricket.

Same as *Cillikā*. The crickets are allied to Grasshoppers, but by habit, nocturnal, omnivorous and destructive to household belongings. Other genera of crickets are—*Gymnogryllus* sp. (The field cricket),

- Gryllotalpa* sp. (The mole cricket).  
Ara. vii. 4a
- Khadyota  
Fire-fly.  
Also known as Glow-worm.  
*Lampyrus* sp., *Photinus* sp.  
order-*Coleoptera* (which includes Beetles and Weevils).  
The insect is nocturnal, with light-producing organs on the abdomen.  
VP. 6.7, 8.4
- Kīṭa  
Worm. The term applies to both helminthic worms and the true worms (i.e., annelidans)  
Ayo XXV. 32a, xxviii. 14a  
VP. 69.298 ff
- Kṛmi  
It denotes helminth worms only, e.g., *Taenia solium* (The common pork tape worm), *Ascaris lumbricoides* (The common roundworm of man), *Ancylostoma duodenale* (The old-world hook-worm).  
Utt. XXV. 12a
- Madhukara  
House-fly—*Musca* sp.  
Bee—*Apis* sp.  
KS. II. 7.8
- Madhupa  
Bee  
Utt. xxv. 27b  
Fly, bee
- Makṣikā  
Fly  
MS. I. 40  
Ayo. xxviii. 14a  
Ara. liv. 65b  
Kis. li. 30b  
MP. 237.6, 250.11
- Maṇḍūka  
Frog  
*Rana* sp.  
Perhaps also toads, *Bufo* sp.  
RV. IX. 112. 4  
X. 16. 14 ; 166.5  
Ref ? S.B.  
MS. XI. 131  
YS. III. 5. 270  
Kis. xxxiv. 23b  
Sun. Ixxx. 19b  
Utt. xxxi. 9a
- Maśaka  
Mosquito  
*Aedes* sp. (*Stegomyia* sp.)  
(transmits human Dengue and yellow fever).  
*Anopheles* sp.—transmits human malarial diseases.  
*Culex* sp.—transmits human filarial diseases.  
MS. I. 40, 45  
Ayo. xxv. 32a, xxviii. 14a  
Utt. vii. 3a  
MP. 250.11
- Matkuna  
MS. I. 40  
Mūṣika (Mūṣaka)  
Rat, mouse  
*Mus* sp.

Yud. xi. 38a. VP. 58.61  
MP. 118.58/237.9, 257.14

**Pataṅga**

Any flying insect, a grasshopper, a bee, butterfly or moth.

Ādi. xiii. 30a, xx. 16b

Ayo. xxv. 32a, xxviii. 14a

Ara. xxxiv. 13b

Kis. Iix. 29a

Sun. xxxviii. 36b, lvii. 27a,  
lxxxvii. 10a

Yud. xix. 25b, xlv. 33b,  
liv. 53b, lxxvii. 3b

Utt xxix. 43b

**Pipilikā (Pipilaka)**

**Ant**

Length 2 to 18 mm ; Ants belong to the fam. *Formicidae*. Insects living in colonies and societies with ranks such as king, queen, workers, soldiers, etc. The common genera are—*Formica* sp. which builds large 'ant-hills', *Solenopsis* sp.,—fire-ant which stings severely and *Monomorium* sp. (small black ant).

VP. 69.298 f.f.

MP. 181.20

**Śalabha**

Grasshopper, moth, locust  
Grasshoppers and Locusts

belong to the Fam :  
*Acrididae* order : *Orthoptera*, whereas Moth belongs to the Order *Lepidoptera*.

Surface Grasshopper—*Chrotogonus* sp.

The desert locust—*Schistocerca gregaria*

The Migratory locust—*Locusta migratoria*

Kis. xIv. Ib, xIvii. Ib

Sun. xxxix. 11a

Yud. xvi. 43b. xIv. 38b

Utt. vii. 3a

**Ṣaṭpāda**

Hexapod, i.e. any insect.

Bee (lit. that which has six feet).

Sun. xiv. 63a

Yud. xv. 8b

**Vatara**

Pān. IV. 3. 119

**Vati**

Pān. V. 2. 139

**Vṛścika**

Scorpion.

*Palamnaeus* sp., *Buthus* sp.,  
*Arachnida*, *Chelicerata*  
*Arthropoda*.

Ayo. xxv. 32a, xxviii.  
9a

Utt. xxviii. 39b

**Yūka**

MS. I. 40

## REPTILES

### Ahi

Serpent.

RV. II. 12. 3.

VII. 30. 1.

S. B. 5. 1. 5. 22.

S. B. 5. 1. 5. 22, 7. 4. 1. 29,

11. 5. 5. 8

Pān. IV. 3. 56

Ayo. xlii. 3b.

Sun. xxxviii. 9b

Yu. xxxvi. 12b

### Andhasarpa

*Typhlops* sp.

A. B. 3. 13. 2

### Āśīviṣa

Ayo VII. 3a

Ara XXX. 19a, xxxiii.

31a, etc.

Kis V. 23C, vii. 23a, etc.

Sun. ix. 54b, XC. 2a

Yud. iii. 39b, xix. 24a,  
etc.

Utt. xxxi. 43C

### Bhujaga (Bhujāṅga)

Serpent (lit. moving in a  
zigzag way).

Sun. ii. 11b, v. 34a, etc.

Yud. cx. 40a

Utt. xlii. 40b. Ayo xvii. 1a

Kis. v. 16b, lxii. 36a

MP. 146.65

### Dvijihva (Same as Ahi)

So called due to its having  
a split tongue.

Ayo xlii 2a

### Gonasa

Cow-nosed. A kind of large  
snake.

MP. 250.11 Bull snake—  
*Pituophis* sp. (non-  
poisonous).

### Manthavala

A kind of serpent.

A. B. 3. 13. 2

### Nāga

Serpent.

Ādi. V. 22b, xli. 7b, 9a,  
xlvi. 31b, etc.

Ayo. xv. 7b, xxv. 27b, etc.

Ara. vii. 32b, xx. 29b,  
etc.

Kis. viii. 19a, xviii. 23b,  
xlii. 3a

Sun. vii. 13a, ix. 13b, etc

Yud. iv. 35a, xvi. 61b, etc

Utt. vii. 18b, xvi. 10b, etc

VP (See Sarpa)

MP. 43.29, 133.25

### Nirdamśī

A kind of non-biting snake.

A. B. 3. 13. 2.

*Natrix* sp. (non-poisonous)

- Thamnophis* sp. (Gartere snakes)
- Pannaga**  
Serpent.  
Ādi. iv. 53b, xiv. 19a  
Ayo. xv. 6b, xci. 12b  
Ara. xx. 29b, xxvi. 22b, etc.  
Kis. v. 8b, xvi. 41b, etc.  
Sun. iii. 39a, vii. 46b, etc.  
Yud. iv. 39b, vi. 1b, etc.  
Utt. ii. 8a, xxi. 63b, etc.  
MP. 5.4, 8.7, etc.  
If a tree, cut down for building purposes, is found to be dark-blue, it indicates fear from serpents (MP. 257.13).
- Sakala**  
A kind of snake.  
A. B. 3. 14. 5
- Sarpa** (Same as Ahi)  
G. I. 64 ; XXII. 27  
Vas. XXI. 24  
KS. VII. 2. 47  
VP. 25.64ff, 70.10-3, etc.  
MP (See Pannaga)  
The *Prāyaścitta* for killing it is the same as that for killing a cat.
- Svaja**  
A kind of snake.  
A. B. 3. 13. 2
- Takṣaka**  
Gecko lizard. *Gecko gecko*.  
It is a non-poisonous lizard.  
So, the killing of the king Parikṣit by its bite seems to be a myth.  
Ara xxxvii. 12b  
Sun Ixxx. 9b  
Yud xxxvii. 62a  
Utt. xxiv. 4a, xxxI. 23a
- Uruga** (Same as Ahi)  
Ādi xxxiv. 9a, XXXVIII. 15a, etc.  
Ayo xix. 1b. XII. 23a, etc.  
Ara ix. 32b, xxxii. 23b, etc.  
Kis V. 31b, X. 3a, etc.  
Sun iii. 59a, iv. 14a, etc.  
Yud xxv. 34b, xxvii. 18a, etc.  
Utt. xxiv. 4a xxvi. 25b, etc.
- Vyāla**  
Serpent.  
Ayo. cii. 4b, cvi. 5a  
Ara. i. 14b, v. 19b, etc.  
Sun. xlii. 36, xlvi. 6b  
Utt. xciv. 15a



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*Aṣṭādhyāyī* of Pāṇini  
*Aśvavaiḍyaka* of Nakula.  
*Do* of Jayadatta  
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# ERRATUM

<i>Page</i>	<i>For</i>	<i>Read</i>
27	(Under Alābu) liteuatre	literature
146	(Under Mārjāra) Fetis	Felis
154	(Between house and sṛmara)	Śṛgāla

The portion from 'As already stated' (p. 106, last but one line from bottom, above footnote) to 'that region' (p. 108, ninth line from bottom) may kindly be read after 'witnessing the fight' (p. 129, last line of text).

'Varana.....in a river' (p. 129, footnote) should be read as 'Vāraṇa.....Sindhura.....a river' under footnote 1, p. 109.



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*Vanaspati Shashtra*

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