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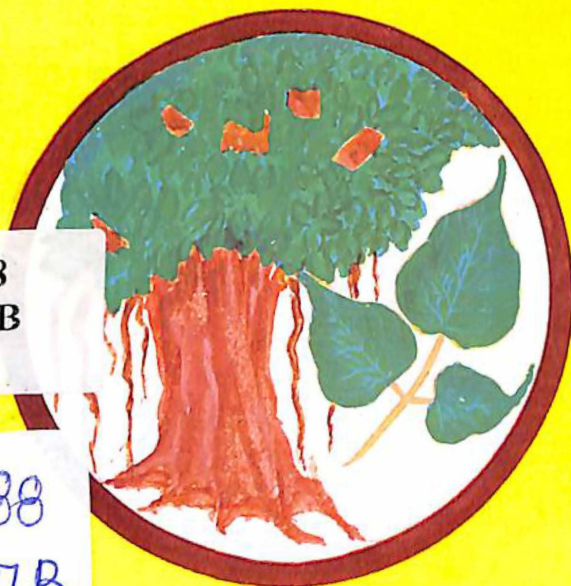
Traditional Family Medicine



Banyan and Peepul

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HEALTH SERIES :
TRADITIONAL FAMILY MEDICINE

Banyan and Peepul

K.H. KRISHNAMURTHY

BOOKS FOR ALL
Delhi-110052

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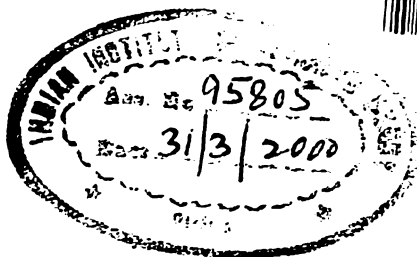
IAS, Shimla

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Published by
BOOKS FOR ALL,
C-2/9, 3rd floor, Ashok Vihar,
Phase-II, Community Centre,
Delhi-110052.

Typeset by
ABC for DTP
6, Rajdhani Enclave, Delhi-34.

Printed at
D.K.Fine Art Press,
Delhi-110052

PRINTED IN INDIA

INTRODUCTION

If you are asked to select two trees as being typically representative of India, you can with all justification point out to the banyan and the peepul. For, both have a hoary history in our literature, both are regarded holy and are associated with so many aspects of our socio-cultural milieu and both are common, popular, venerated, multifarously useful and also medicinal all over India. Banyan is a vast, almost an eternal tree giving an expansive and an inviting shade and a shelter as well as a source of food to innumerable, birds, squirrels, monkeys and so on. Peepul is particularly holy associated as it is with Buddha and the Lord Dakshinamurthi; its reference occurs in the Vedas and the Bhagavadgita. There is probably no village in most parts of India where you do not have either the

banyan or the peepul and most probably both. Every child is familiar with both of these trees and so many fables have grown around them, in fancy and also in history.

A. THE BANYAN TREE

Why does English call this a banyan tree? The reputed Chambers Dictionary traces the history of this word as follows. It is from a Portuguese term *banian* which is perhaps through the Arabic *banyan* which is in turn from the Hindi term *banya* related to *vanij* of Sanskrit, meaning a merchant or a trader. The term 'bania' in English came to mean a Hindu trader, particularly from Gujarat. These traders from India were habituated to stay under the shelter of this tree particularly and conduct their activities and business so regularly that the tree itself got the name of a bania's tree or a banyan. This term has in turn given two other words to English language viz. *banian*, "a loose under garment worn in India" and *banian days*—"a rather obsolete term now, meaning days on which no meat was served, hence days of short commons generally, from the abstinence from flesh of the Banian merchants."

Sanskrit calls this tree as *vata*, *vata vriksha*. Curiously this was not how reference was made to this tree in our own earliest literature. The most ancient name for this tree with us is *nyagrodha*. It came to be known as *vata* much later. Interestingly, neither Rigveda nor Samaveda has

any reference to either *nyagrodha* or *vata*; there is no description of the tree in either of these two vedas at all. However both Yajurveda and Atharvaveda make ample references to this tree as *nyagrodha*. The later vedic literature such as Shatapatha and Altareya Brahmanas and the Sutras like Katyayana's refer this plant well as *nyagrodha* and not as *vata* at all. The latter term was simply not in vogue in those times.

It is from Valmiki, the author of Ramayana onwards that the term *vata* gets a great prevalence, though the name *nyagrodha* also continues to linger. The term *vat* is presumed to be a corrupt, Prakrita form for the Sanskrit *vritta*, round, that refers to the extensive circular canopy of the foliage of this tree.

Names

Sanskrit offers a large number of names for this familiar tree. A glance at them which are altogether twenty one, will afford us an idea of how this plant is estimated. The names high-light descriptive aspects of the plant or *mythological* associations.

Descriptive and mythological names: *Vata*, (the meaning that this refers to the circular canopy of foliage as noted above is what is suggested by a great European Scholar, Sir Monier Williams. Indian scholars however presume that the term means a tree which surrounds another tree, which is how the banyan tree mostly starts its life-ultimately smothering the tree on which it first

struck root), *bahupada* (with many feet connoting the numerous prop roots on which the large canopy of the foliage is supported), *kshiri* (a milky tree), *raktapada* (whose young tender hanging roots are red in colour), *avarohi* (growing downwards in the form of the perpendicular roots), *mandali* (forming a large spread of foliage), *vitapi* (a forest like tree, because of a large number of the prop rooting all around the initial source like a big thicket), *maha chaya* (giving an extensive, great shade), *nyagrodha* (preventing sun and rains against falling down on the ground because of its own dense foliage and the shade), *yaksha taru*, *yakshayasa*, *yaksha vasaka* (a tree of the yakshas, a type of malicious demi gods); *vaishravana vasa* (an abode of Vaishravana or Kubera, the Lord of wealth), *dhruva* (eternally living), *vanaspati* (the Lord of the forest), *nila* (leaves are dense blue or bluish black), *shringi*, *shungl* (the bud of the new leaves appear horn like being enclosed tightly within a brown envelop of a leaf like structure, the stipule), *rohini*, *rakta phala* (coppery or red fruited).

The following terms indicate the way the plant grows: *skandhaja*, *skandha ruha* (growing on a stout trunk of the prop roots), *shipha ruha* (sprouting from smallish roots), *pada roha*, *pada rohi* (growing with the support of other prop roots) and *danta* (controlled by means of prop roots). Both banyan and peepul are known as *griha shatru*, or an enemy of the house as they strike root in odd places on a building damaging the latter.

Regional languages also have many names. It is called *bad*, *badlo* in Gujarati; *alada mara* in Kannada; *ala maram*, *arsi maram* in Tamil; *bod bohad* in Punjabi, *ala vrikshan*, *ala maram* in Telugu and *bad*, *burgadh* in Hindi.

The Plant of the Banyan

This is a tree of the mountainous forests but abundantly available in the forests of the plains as well. It is most probably a native of the Lower Himalayas and definitely of the Indian Sub Continent. The genus *Ficus* to which the banyan belongs itself appears to be a native genus of India. It contains a large number of species all of which are very familiar almost all over India. Banyan is one of them and is technically called *Ficus benghalensis* Linn; which means the *Ficus* from Bengal. The tree is cultivated or grows by itself almost everywhere in India. Charaka had also considered this as a tree abundantly available in the forests.

There are many traditional stories associated with this venerable tree of India. In the Text of Shatha Patha Brahmana, this is how the origin of *nyagrodha* is depicted. Once upon a time, the gods performed a great *yagna* in the holy land of Kurukshetra and attained the abode in the heavens consequently. During the performance of this sacrifice, the gods had established the laddle for the oblation of soma (*soma chamasa*) with its face pointing down. It is this ladddle itself that

grew into the *nyagrodha* tree subsequently. Altareya Brahmana declares that the banyan tree first took its appearance on the earth, in the lands of the Kurukshetra. The nectarine *soma rasa* falling down from the ladder became the braids of the hanging roots of the tree (the *jata*), and whatever else of this *soma rasa* that had still remained went upwards to become the fruits of the plant. Shatapatha Brahmana continues the metaphorical rendering and asserts that the tree of *nyagrodha* is the *svadha* fallen down from the bones of the Lord Indra.

Ficus benghalensis Linn belongs to a very large botanical family of plants called Urticaeae. Besides the genus *Ficus* to which the banyan belongs, the family includes quite a number of other important and familiar plants like the mulberry and the jack fruit. *Ficus* itself includes such famous trees as fig and *gular* apart from banyan and peepul.

Banyan is a large and extensively spreading tree. It is deciduous in nature viz it sheds down its foliage during particular seasons. It grows to a height of even thirty metres often. The stature and the spread as well as the extent of its prop roots of the tree reach their greater proportions in the alluvial soil of Bengal than in the higher Gangetic plains of Uttar Pradesh. It is therefore, rightly called "*benghalensis*". But the girth of the main trunk is greater in the drier plains of the Northern India than in Bengal. This may go upto seven to nine metres.

Leaves are large, leathery, dense, shining green, ten to twenty centimetres long and five to thirteen centimetres broad. They are attached to the stem by means of stout, short and strong stalks. As characteristic to the family, young leaf buds are completely encircled by a brownish scale of the stipule which falls down as soon as the bud starts sprouting but leaves a clear scar below the leaf. Fresh leaves start appearing from February onwards upto March and the young leaves are attractively reddish in hue. In dry places the tree remains leafless in the hot summer, but usually the plant retains its foliage throughout the year.

By the middle of February to May the bright red fruits stud the expansive canopy in great profusion offering a feast for innumerable birds, squirrels, bats and deer in the forest floor. Sometimes the fruits are bright yellow. Compared to the size of the tree, the fruits are insignificant. But they occur in ample richness so much so that even if a great many of them do not yield any viable seeds which in turn are almost microspic, just a few of them is enough for the successful propagation of the tree.

Ancient Sanskrit authors had presumed that the Banyan belongs to a class of plants which does not produce any flowers and develops the fruits without first developing any flowers at all. Botanically this is incorrect. What is called a fruit is actually a cluster of flowers or a whole inflorescence itself which is cup shaped and specialised-known technically as a hypanthodium.

This is what characterises all plants of the genus *Ficus* including banyan. The axis of the inflorescence is fleshy, edible, bright, coloured, attractive and cup shaped, opening out at the top through a narrow aperture which in turn is guarded by a few down-ward scales. The floor of the cup is lined with a layer of small inconspicuous flowers, male as well as female. The cup is actually a trap for the insects which enter it in search of food and are forced to do the work of pollination incidentally. Without these insects the trees cannot produce any off springs at all. These are called fig insects and they lay their eggs within the flowers. When the eggs hatch to release the insects, the latter get out of the cup carrying a load of pollen dust by which they finally pollinate the stigma of other flowers.

In the olden days there was a practice of growing the banyan and the peepul trees in the neighbourhood of all the cities. The early records of the British periods in India such as the Imperial Gazetteer of India show ample evidences for such a tradition. The city of modern Baroda is so called because it was entirely encircled and infact lying within the belly of such an encirclement of the banyan trees. Its name was *vatodara* (lying in the womb of the *vata* trees) by which term the city is still called in Gujarati. Manusmriti recommends that the banyan and the peepul should be planted to demarcate the limits of settlements, villages and cities as border trees or the *seema vrikshas*. The

other trees of this category are *kimshuka* (*Butea frondosa* koen), *shalmali* (*Bombax malabaticum* DC), *sala* (*Shorea robusta* Gaertn) and *tala* (*Borassus flabellifer* Linn). These are all perennial, long living and big sized trees of characteristic appearances and hence could easily serve as distinctive identificatory marks. There was a recommendation to plant the banyan tree in the eastern corner of the house.

This is a very hardy tree; it can very well resist severe heat as well as biting cold. Heavy hoar-frost may cause injury of frost-bite to the leaves of the tree, but they would soon recover and become healthy as usual. The extreme drought of 1907-1908 in Ayodhya did not kill the banyan trees there.

An interesting method of cultivation to which the tree responds very well is the Bonseye method. This is a Japanese way of producing these huge trees in a miniature and permanently stunted form within boxes and artistic containers as decorative pieces in the drawing room. Banyans can be started by sowing the seeds of the fully ripened flower or by planting cuttings from mature well grown trees. Seeds are to be sown in a mixture of fine charcoal or brick bats. To save the young saplings from the heat of the day, the containers are to be kept indoors under the shade. Cuttings are best planted in the months of January to March selecting them in 2 to 3 metres long pieces. It is necessary to water them well till the rainy

season. Or, plant them when the rain commences. The results are always good.

Some Famous Banyans

Some of the individual banyan trees become so extensive, large, prominent, long living and well known as to become land marks in history. It is interesting to mention a few of them.

A perusal of the great epics of India, reveals that there existed a vast banyan tree in the early Christian era in the holy pilgrimage centre of Prayaga and this remained till the mediaeval times. Its mention occurs in Ramayana! When Sita reaches the vicinity of this venerable Lord of the forest, itself surrounded by a huge forest of other trees as well, on the way to Chitrakut, she worships the tree and asks of it the boon of chastity. On returning from Lanka after the fourteen years of *vanavasa* and the war with Ravana, Sri Rama points out this same tree to Sita remarking that here is that tree worshipped by you on our way to the forest. "It is this famous darkish blue (*shyamavata*) monarch of the tree whom you had worshipped. See it is studded now with millions of gem like red (*padma raga*) jewels of fruits". This is the tree of which the sage Valmiki sang upon (before 400 years B.C. at the most), and what the poet Kalidasa wrote about (in 600 AD); the later poet Bhava bhuti refers to it by the same name *shyama vata* of Prayaga Kshetra (in the 8th Century). Still later authors like Murari (in 1050-

1135 AD) began attributing divinity to this lordly tree.

Another tree of the same genre is what the author of Mahabharata, the sage Vyasa refers. He calls a banyan tree that was growing in the Gaya mountains near about Prayaga by a name "*akshaya vata*" a deathless tree. It is not clear however whether this and the *shyama vata* referred above were the same tree or there was an amount of poetical licence here. But there does not seem to be any reason for doubting the existence of a great *shyama vat* in the sacred lands of Prayaga. A lexicographer like Bhanuji Dixit refers to a *shyama vat* of Prayaga in his Medini Kosha and Goswami Tulasidas (in 1532-1623) gives the name *akshaya vat* to a banyan tree of the Prayaga sangam. This individual tree was a forest of a banyan under which a vast concourse of sages were residing as the poet of Ramacharita Manas remarks.

On the whole there is ample evidence for the existence of both of these famous banyan trees, one at Prayaga and the other at Gaya. The former is referred to among many other poets, even by the Chinese traveller Huen Tsang who calls it a tree of death as those who desired heaven would commit suicide under this tree, a fact vouchsafed by an account of it in the work called Prayaga Kshetra Mahima. There is a record of this tree having been seen even in Jahangir's times. The Gaya banyan is also equally famous. A Kashmiri poet Kshemendra

refers to this plant. Gayamahatmya extols the merits of conducting Shradda Ceremonies and giving *dan* under this banyan.

References to banyan in our literature are numerous. Savitri's name is associated with a vow to be performed under the banyan tree; the vow itself was called *vata savithri vrata*. The shade of this tree is most hallowed for all religious ceremonies, discourses, *veda pathana*, marriages and other auspicious functions and so on. The imposing and the typically oriental vastness of the tree had impressed poets from Europe as well. The great English poet Milton includes a grand description of "the pillared shade, high, over arched and echoing walks'et ween", of the Indian banyan tree.

A few such individual trees of modern times may now be mentioned. One of them is the famous banyan tree of Calcutta Botanical Gardens. Its measurements are recorded in 1905 itself as spread of the tree 86.40 metres in the North-South direction, 90 metres East-West; circumference of the 'main' trunk 15.30 metres, the circumference of the canopy 285.40 metres, height 25.50 metres; the number of the prop roots 464. The main trunk of the tree is now dead but the spread continues. There are indubitable historical evidences of trees bigger than this Calcutta tree even. A historian named Warner writes about a banyan tree in Satara (Maharashtra) in 1882. Its canopy circumference was 484 metres, its spread from the

main trunk in the North-South direction was 153.50 metres in the East West 134.60 metres. There is a record of a banyan in Andhra whose spread was 610 metres. Another author Fortes writes about a vast tree of the Narmada, near Broach, bigger than this tree even: "a great portion of this tree has been lost in the floods, but the spread of the remaining tree is itself nearing 610 metres". On the sea coast at Ormuz in Persia (now Iran) a huge banyan tree was seen in 1623, under which the trading *bantas* of India had made a shelter as well as a market place and a temple besides, as an author Valentijn wrote in 1691. It is because of being an abode of the *bantas*, the tree got its name as the banyan tree. In a book "The voyage from England to India" (1754-1773) its author writes about having seen this grand tree. A recent tree is the famous banyan tree of Adyar in Madras, a tree which almost died in the heavy rain of 1989, but stands now revived.

Varieties of the Banyan

Valmiki gives four separate names for the banyan: *nyagrodha*, *shyama nyagrodha*, *vata* and *bhandira*. There is every reason to presume that he meant thereby four separate varieties and they are not synonymous terms at all. What he writes about in Prayaga is (darkish blue) while *bhandira* is the banyan on the banks of Pampa in his Aranya Kanda. Their distinctions however seem to have been forgotten by the later Sanskrit authors to.

such an extent that all of these terms began to be regarded as just the banyan.

An important variation in the tree is that some have very few hanging roots or there may not be any at all, while others have a profusion of them. Chkarpani, a commentator on Charaka considers the former as *vata* and the latter *nyagodha*.

There is an amount of variation in the leaves also. In some, the young sprouting leaves that ensue in great abundance during spring are beautifully reddish. The whole tree looks grandly decorated then, with a striking coppery red profusion. In others this does not occur, the young leaves are rather plain and just green.

One Nara Hari Pandit (1235-50 AD) recognised a variety of *vata* which he called as *nadi vat*, the banyan of the river bank. There are eight names in Sanskrit for this variety: *nadi vat* (the riverine banyan), *vataka*, *vati* (the smaller banyan); *kshira kashta* (having milky i.e. laticiferous wood), *siddhartha* (a shelter for the *siddhas* or a tree under which the wishes are fulfilled), *amara* (death less) and *yagna vriksha* (what becomes used during yagna).

Ficus Krishna is an unusual banyan. Though it is given a separate specific name, it is often regarded as but a variety of the banyan itself. Here the speciality is that the basal lobes of the leaf turn back and get united together as it were to form a cup like structure. It was presumed that Lord

Kushna had slept on the leaf of *this* banyan tree. Botanists have used this legend to name the plant as *Ficus Krishna*.

Botanical Description

This is a very large tree, probably the largest of the world if only the lateral spread is taken into account. In height it may reach thirty metres. The speciality of the habit of the tree is that it sends down many aerial roots from the branches and thus extends the growth and spread of the tree indefinitely. These roots grow downwards continuously and on reaching the ground may penetrate even upto twenty feet below and develop individual trees in turn which remain however in physical continuity of the parent tree. The result is a forest of these younger props and their own foliage continuously growing all around the main trunk which also persists quite often. The shade, the shelter and the rich dense canopy of the foliage consequent upon such a habit of growth makes the banyan the wonderous cover that could at times offer a cool cover to a thousand people comfortably. As seen above, quite often, individual banyan trees reach awe inspiring proportions.

Young parts of the plant are softly hairy. Leaves are thick, leathery, 10.20 by 5-12.5 cm in dimensions, ovate or rather round and ovate to elliptic in shape. Apex is obtuse while the base is usually rounded though at times it may be somewhat heart shaped. Leaf blade shows 3-6

nerves with about 5-7 pairs of lateral nerves above the basal ones. In between the nerves, there is a distinct net work of thinner veins all over. Leaf stalks are short, stout and have coppery red or brownish rather leathery stipule (or a leaf like structure below the regular leaf) completely encircling the leaf bud (called technically as amplexicaul—viz stem embracing, stipules). The stipule falls down as noted above leaving a distinct scar mark.

The flowers are male and female, very minute, inconspicuous and completely enclosed within a specialised inflorescence called hypanthodium as seen already or the receptacle. These receptacles spring forth from the stem surface of the major trunks or the branches. They are about 2cm in diameter, stalkless, usually found in pairs, softly and minutely hairy, red (or very occasionally yellow) when ripe, fleshy and edible. Male flowers are rather numerous and placed near the mouth of the receptacle while the female flowers are but a few and placed right at the base. In between there is an abundance of neutral flowers called gall flowers.

The plant is probably a native of the Sub Himalayan tract and Western Peninsula but is planted and found almost everywhere in India.

Medicinal Importance

It is interesting to note that this venerable tree of India has many useful medicinal properties and is

actively employed as well for a number of household remedies and folk lore practices.

Ayurveda considers that all part of the tree are astringent in taste, sweet as well and cold in quality. Astringent taste confers an important medicinal activity: that of being contractive to living tissues and thus aiding in the healing of injured regions. All parts of the banyan tree can thus be employed as a readily available and very simple application for healing-anywhere in the body. They may be applied with beneficial results to fresh lesions, wounds as well as to old ulcers. The plant is particularly useful in injury to the bowels. It helps in contraction of the intestines and heals up. The leaves are specially useful in healing the ulcers, pus filled wounds and old sores.

In general, the milky juice, the seeds and the fruits of the banyan tree are useful in the form of external application to pains, bruises, sores and ulcers. They are also beneficial in rheumatism and lumbago (a rheumatic affection of the muscles or the fibrous tissue in the lumbar region viz at the loins). They are employed in cracked or inflamed soles of the feet and to the teeth and the gums in tooth ache.

Bark of the tree is regarded as particularly astringent, cooling and dry and also diuretic (or inducing profuse urination). Ayurvedic *nighantus* or the lexicons attribute the following quality to the banyan plant: a curing of *daha* (burns), *trishna*

(thrust), *moorcha* (faintness) and *rakta pitta* (haemorrhage).

Major parts of the plant used medicinally are bark and the milky juice.

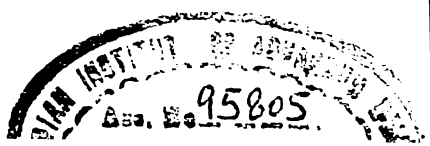
However all parts have some medicinal value or the other. They include bark of stem and root, hanging roots, leaves (young, mature and even the fallen down yellow leaves), leaf buds, and the fruits as well as the seeds.

All parts of the plant again are useful in the aggravations of *kapha* and also that of *pitta*. They do find an useful application in a few important diseases as well such as: fever, uterine disturbances, fits and in erysipelas-a painful reddish and spreading eruption on the skin (called *utsarpa* - that which spreads about irregularly). The young leaves are seen to be profitably employed even in advanced cases of leprosy (*galita kushta*) where organs (such as fingers and toes) have started falling off. The milk or latex of the tree is an analgesic (i.e. a pain killer) and a good healer of wounds- the injured tissues show a rapid regeneration after an application of this milk. The dried, yellow leaves of the tree are applied in considerable numbers over the body in order to induce sweating, an act which in itself may be beneficial for example in a patient of raging fever. The tender leaves can be conveniently employed to get relief from the distresses of *kapha*, for eg. collection of phlegm in the throat. The bark of the tree is a known styptic (*Samabhaka*) drug that

would cause a strong contraction and thus help in preventing bleeding specially in cases of haemorrhage where there is an excessive loss of blood due to the rupture of the walls of the blood vessels.

Soak the barks of the tree overnight in cold water after grinding them well. A cold extract prepared in this simple manner yields a drug which is quite effective in diabetes mellitus or *madhu meha*. The seeds of the tree are cold and nourishing. The leaves are warmed up rather to a considerable degree and applied as poultice over purulent (viz pus oozing) ulcers, boils and wounds; the beneficial effect is quite noticeable. The old yellow leaves of the tree just fallen to the ground are collected and cooked along with rice. A hot decoction of this rice is given to induce sweating. In Punjab the fibres of the young hanging roots are given to get relief from gonorrheal pains. The root fibres are considered to be powerful and sure purifiers of blood like the famous drug specially meant for it viz *sarasa parilla* or *Smilax*. Cold extracts of tender hanging roots is seen to be beneficial in controlling a type of bleeding, that accompanies phlegm as it happens at times for a patient of *rakta pitta* or plethora.

• Farmers during the rainy seasons or even housewives constantly working with water commonly complain of cracks and bleedings at the basés of the fingers and the toes. These heal up well by an application of the latex or milk of this



tree. Placing a swab of cotton soaked in this milk at the base of the decaying teeth, will take away the severe pain of tooth ache and will also heal the concerned tissues. When there is a pain at the waist or there is a troublesome inflammation at the joints, an application of the milk over the regions followed by some massaging if felt needed will prove beneficial. During the affliction of too much of urination or ample urination at a time, a decoction of the root bark is given as a curative. Giving the juice of one or two tender shoots in milk will mitigate the burning felt at the time of passing urine that a patient of gonorrhoea usually suffers from.

We have seen above a few household remedies employing the various parts of the banyan tree. We shall now mention some of the specific uses of the plant in a selected list of diseases. Many of these are age old remedial measures. It can be easily seen that the medicinal value and utilisation of the plant is not at all inconsiderable.

As a Wholesome Drug for a Pregnant Woman

If a lady after menstruation commences taking to eating ground down hanging roots under the asterism of *Pushya nakshatra* and does so in the fortnight of *shukla paksha*, the foetus of even a barren woman will stay; there is no danger of any abortion! There is a ritual called *pumsavana* performed for the pregnant woman for securing a male child. Charaka describes the procedure of

using banyan during this ceremony. Select a banyan tree that has grown in the grounds of a cowshed. Pluck out two excellent tender sprouts from an eastern or a northern branch of this tree and let the lady drink them with curds along with two big sized grains of *udad* (black gram) or two big sized grains of *sarasa* (mustard) during the asterism of the *Pushya* star. For those who have a tendency or fear of abortion are well advised to drink the bark, tender shoots and the young hanging roots crushed well with water by means of a pestle in the mortar. They are sure to benefit. If bleeding is seen in the fourth month, the lady is to be asked to lie down on a soft bed, and very cold decoctions of the banyan and the like are to be sprinkled about below her navel region. A swab of cotton soaked in milk or ghee in which tender leaves of the banyan are cooked, is to be kept placed well in her vagina. The same medicine is to be given to her for drinking, the dosage being six to twelve grams. As a *pathya* (or the necessary salutary measure), she should be given the tender sprouts of the banyan in goat's milk. By such a measure, the foetus stays steadfast and develops well; there will be no chance of abortion at all. A decoction of the tender shoots in which milk and a little sugar is added is also a good drug for stabilising the foetus and prevent the chances of abortion. The action of this drug is so sure and quick that as soon as a suspicion arises of the possibility of an abortion, an instantaneous taking

in of this decoction itself will prove greatly beneficial.

In Leucorrhoea or the Whites; Pradara

This is a very common complaint of the women wherein there occurs an abnormal, white mucous or muco purulent (i.e. pus containing) discharge from the vagina. The decoction of the barks or the young shoots of banyan is an astringent, constrictive and a highly cooling drug. As such, employing it during these cases of whites is always beneficial. This decoction is actually administered in red discharge (*rakta pradara*) also. Milk and sugar can be mixed with the decoction to render it more wholesome and palatable. Drinking of ghee cooked with a decoction of the hanging roots as well as a *kalka* or paste of the same is considered an excellent drug in the red discharge of *rakta pradara*. In leucorrhoea, along with the decoction of banyan, a drinking of the *kalka* of *lodhra* (*Symplocos racemosa* Roxb) is advisable. In the decoction of the bark, the tannin content is great-nearly ten per cent. Using this decoction as a washing drug in leucorrhoea is also beneficial. An application of the hanging roots or even the milk thereof will render the breasts hard.

In the Diseases of the Stomach

The tender shoots or the tender hanging roots are to be ground with the scum of the rice water. This is to be drunk along with *lassi* or sweetened butter milk. Such a simple procedure will clear all

troubles of the digestive tract - specially the hardened stools and the constipative distresses.

In veterinary medicine, when an enema is to be administered for the elephant, it is these two drugs viz the banyan and the peepul that are employed. Because of a great percentage of the tannin content a cold infusion of the young buds is very beneficial in dysentery and diarrhoea. The tender fibres of the hanging roots are useful in preventing or at least checking violent vomiting.

In Thirst and Burning Sensations

Take broken pieces of earthenware pots, or black mud or even sand. Set them on fire and make them red hot. Take tender buds of the banyan tree and place them in cold water. Dip the red hot pieces now in this water and let them cool down. Let the patient of excessive thirst due to *pitta* drink this water after it becomes fully cool. Drinking infusion of the root of banyan after mixing ghee with it is advised to quieten the burnings of fever.

When the leaves become yellow by age, they are cooked with roasted rice and a decoction is made. This is to be drunk to mitigate the distress of fever and also to reduce the fever itself.

In Cough

Fresh, wet, sprouts of banyan and an equal quantity of *mainshila* (red arsenic which is also called realgar) are ground together and mixed with ghee. A patient of severe cough having an

oppressive pain in the chest is advised to *smoke* this drug in. This would give a commendable relief.

Young tender leaves of banyan have a property of destroying phlegmatic collections.

In Complications of Panchakarma

Pancha Karma is a measure of medication in Ayurveda advised in many cases for preparing the patient, before the principal procedure and treatment are under taken. This includes five steps such as emesis (vomiting), purgatives, sudation (or induced sweating) and enema, oily and dry. It often happens however in some cases of purification by means of emesis and purgation, many complications arise due to an over dosage (or *atlyoga*), of them. In such cases it would be beneficial to give a drink prepared from young sprouts of milky trees like the banyan. If a very hot or acidic or strong enema is given to a person of *pitta* tendency, his rectal region gets agitated, inflamed and he may suffer from many other complications in addition. Multi coloured bleeding may occur or billious fluid may get discharged and troubled by these distresses the patient is likely to swoon and fall down also occasionally. In order to get a sure relief from such attendant afflictions, Charaka advises to take fresh leaves of the banyan and the like, grind them well and cook in ghee. This is to be mixed in goat's milk and cooled. Enema should be given with this drug for such patients.

For patients of piles, milk of banyan is placed on *batash* (a semi spherical or flat cake made up of sugar syrup; this is very light and spongy) and then given to eat. They will secure a pleasant relief.

In Urino Genital Diseases

The banyan tree is classified by Charaka under the group of great astringent drugs, that are conservative of urine (*mutra samgrahaniya*) in addition and also under the group of astringent trunks. Sushruta elevates the banyan itself as forming an important class of plants called by its own name viz *nyagrodhadi gana*. The tree finds many applications in several disorders of urinary function.

In cases of excessive or too ample an amount of urination (*bahu mutra*) or polyuria, a decoction of the bark of the banyan is given with benefit. A patient of diabetes mellitus is advised to eat the fruits of the banyan. These fruits are cooling, astringent and constrictive and also act as obstructive of urination (*mutra rodhaka*). A decoction of the hanging roots is advised for patients of *prameha*. In treating diabetic patients, cold infusion of the barks is a powerful and a strengthening drug. This is considered to be particularly effective in reducing the blood sugar level of these patients—a very important and highly beneficial need for them. The other drugs of the same reputation besides the banyan bark are the

seeds of *jamun* fruit, the bark of the peepul tree and the fresh leaves of neem.

Spermatorrhoea or *shukra meha* is a disorder of urinogenital tract during which sperms get discharged along with urine. For this disease, take tender shoots and hanging roots of banyan, dry them and powder. It is this powder that is to be taken in small doses, almost as a little bit or pinch but at frequent intervals.

For securing seminal retention (*utrya stambhana*), pills made of opium and nutmeg pestled well in a mortar with the milk of the banyan are taken. Four to five drops of this milk on a *batash* will render the latter curative of too quick a seminal discharge or such a discharge taking place in sleep. Even the bark is regarded as having an effect in the retention of semen. Scantiness and weakness of semen get rectified by taking a thick decoction of banyan along with other nourishing substances.

In Punjab, the tender fibres of the hanging roots are used in cases of *puya meha* where pus gets discharged along with urine. Their action is presumed to be as effective as the famous drug of *sarasaparilā* or Smilax.

In *gout (gathia)* and *rheumatism*. Dried leaves of the banyan induce sweating. In regions of pain and inflammation due to gout a decoction of them is employed to wash the affected parts well and bring about much of a sweating. This will itself reduce

the violence of the affliction and be curative as well. A decoction of the tender hanging roots is administered to patients of *vata rakta*.

The milk of the banyan is generally regarded as a good analgesic or pain killer. It is locally applied beneficially in rheumatic complaints (*amavatu*), pains at the waist and the joints as well as in any other pain anywhere else also.

In Boils and Injuries

As just indicated, the milk of banyan is an analgesic drug. Simultaneously it is a *vrana ropaka* drug also viz it heals the wound and hastens quick regeneration of the injured tissues. An external application of the milk is carried out in cases where there is cracking of the palm and the sole of the foot, any morbid swelling and particularly in pains and in inflammation at the loins. This is an effective remedy for chil blain (*bimat* in Hindi) where a painful and red swelling arises specially on hands and feet in cold weather. For abscesses and boils, a warmed up leaf of the banyan is tied all by itself or along with other poultice materials.

Injured regions are first washed with a decoction of the young sprouts of the banyan tree. Other sprouts are then crushed, made into a paste and applied over the regions concerned. The swelling as well as the pain, both will get reduced as result. A quick healing and an appreciable regeneration will

also come about. Atharva veda regards this as a powerful destroyer of worms. If for instance any region of injury or ulcer gets so infested with maggots as to be excessively painful and repulsive, fresh milks of banyan are to be applied every time over the regions affected-morning, afternoon and at night - three times a day. This is sure to give a beneficial result.

Applying tender shoots and the like of the banyan along with ghee as the medium of administration or any other suitable medicine or by themselves alone will mitigate the flaccidity and the tenderness of the wounds.

Modern studies have confirmed that the banyan milk is a beneficial and constrictive drug in all cases of lesions and injuries. This is what numerous home remedies and folk lore administrations of banyan already employ.

In Erysepelas or Visarpa

This is a painful and irregularly spreading red eruption on the skin. Such a patient suffers from great distresses and is often very restless. This may occur in patients who retain an amount of vitiation at the flesh and the skin superficially though internally they are well purified. Or, the persons may be having but a little abnormality leading to such a distress to a slight degree only. For all such patients the following is a good remedial preparation.

Take tender hanging roots of the banyan, the tender pith of the plantain tree and *bhis* or the lotus stalks. All of these are well known cooling drugs. Grind them in ghee, washed thousand times. Prepare an ointment and apply. This is a recommendation from Charaka. He gives a list of 29 ointments specially meant for *visarpa*. In many of them both banyan and peepul find an entry. Another ointment is as follows: Take the young leaves of a banyan *gular*, *plaskha*, bamboo and peepul and prepare a *kalka* or paste. Mix this with an equal quantity of ghee and apply this as a cold ointment over the whole area affected by erysepelas.

In Kushta-Leprosy

Tender young leaves of banyan are considered to be salutary to a patient of leprosy. Even if leprosy is advanced upto the bones, carry out an external application of the milk of the banyan for seven nights and tie over the regions a *kalka* or paste of the bark of the banyan. This will mitigate the distress and also act as a curative.

Another medicine given in these afflictions is: a decoction of the fibres of the tender hanging roots is given along with *sariva* (*Hemidesmus indicus* R.Br.). This is a purifier of blood. This measure also results in curing eryepelas which is regarded as mainly due to the vitiation of blood.

In Bleeding

Administering banyan along with sandal wood is advised in cases of haemorrhage for a patient of plethora wherever it may be taking place-as it does spontaneously in these patients at the nose or the rectal region. Banyan leaf is to be rubbed against a hard stone (for instance, on which sandal wood is rubbed to prepare its paste) and this is to be licked with honey by the patient. A decoction of the tender leaves of the banyan or its bark is given as a drink in order to stop bleeding. Specially in the cases of rectal bleeding as it occurs for a patient of *rakta pitta*, making him drink the milk in which the tender hanging roots of the banyan or its tender shoots are boiled is found beneficial. If such a patient is having a constipative seizure, serving him with hen's meat cooked in a banyan decoction is advised.

Haemoptysis (*naksir* in Hindi) or spitting of blood from the lungs is another common manifestation of patient of *rakta pitta* or plethora. Making such a patient drink a cold infusion of the smaller twigs of the banyan will prove beneficial. Charaka recommends the application of any suitable cold preparation of banyan to prevent excessive bleeding in all cases of bite from poisonous animals.

In Snake Bite

Vipers (*mandali sanp* in Hindi) are one of the very common poisonous snakes of India. The

tender twigs of banyan are to be rubbed and given as a counteracting drink in bites of this snake. This is a recommendation from Charaka, though modern studies have not confirmed this assertion.

Some Miscellaneous Medicinal Uses

An external application of the milk of banyan over the regions concerned followed by a gentle massaging if needed is seen to be beneficial in all cases of sprain (*moch*) anywhere in the body. Any injury anywhere also reacts well to this medication. The pain and the violence of rheumatic swellings will get much mitigated by an application of the banyan milk. Using a decoction of the bark of banyan as a gargling material will cure the diseases of the gums and teeth. Good sized hanging roots of the banyan are one of the most highly recommended materials to be used as tooth stick for brushing and cleaning the teeth (*datun*). Chewing these sticks incidentally keeps the teeth healthy and makes them strong and long lived. As noted above the banyan leaves are to be tied over the pus oozing wounds and ulcers. When this oozing stops which it does quite soon and the boils and eruptions turn yellow, leaves of banyan are to be boiled with rice for a long time till the fluid gets thickened and a fomentation with this medicated stuff is to be carried out over the same parts concerned. The relief is very appreciable.

Drinking the ground down bark as a cooling medicine is beneficial in difficulties of urination.

The young sprouts of the tender hanging roots are crushed well in a mortar with the pestle and given as a drink; this will stop strong and uncontrollable vomiting which does not stop or react well to any other medicine. Eating *batash* treated with banyan milk for three days in the morning is adequate to secure a relief from *mutra kricchra* or difficulties in passing urine. Swellings of goitre are seen to react well for an external application of the milk of banyan over them. Even in the dreaded disease of gonorrhoea (*upadamsha*), banyan is seen to be useful. For this, drinking of the ashes of burnt leaves of banyan in water is advised. In the cases of burns or scaldings by severe heat, an external application of the tender twigs of the banyan crushed and ground with curds of cow's milk will give a great and quick relief.

Cancerous ulcers are believed to get healed and filled up after a few drops of administration of the following: Mix the ashes of a snake's discarded skin in the milk of the banyan tree. Moisten a thin piece of cloth in this fluid and prepare a wick out of it. Place this wick in the ulcerous tissue.

Eating a pulped up mass of the crushed leaves of banyan along with sugar and honey will quench the out bursts of plethora or *rakta pitta*. Burning at the eyes gets quietened by applying banyan milk at the eyes. Eating the ashes of the burnt banyan leaves will stop excessive vomiting.

It is Chakara Datta who recommends the use of the juice of the fruits with the finely powdered

camphor to be applied in Sukra Roga of the eyes. Bhava praksha, a work of mediaeval times, asserts that this juice proves useful in treating *arbuda*, or cancerous tumours.

Yunani Opinion

According to Yunani physicians, banyan is cold and dry. Its milk is of the third degree cold and dry. The milky juice of the plant finds many an application in this system of medicine also as in ayurveda. It has been seen to be beneficial in piles and the diseases of the nose. It is considered an aphrodisiac (i.e. stimulative of sexual urge), well nourishing and a maturant (i.e. that which helps in maturation of abscesses etc. and thus their healing) to ulcers, boils and abscesses. It mitigates inflammations and morbid painful swellings. These hanging roots have been employed beneficially in stopping the bleedings of the piles and also of the nose in the patients of plethora. These are also aphrodisiac and in addition have been found to be beneficial in the venereal diseases of syphilis as well as gonorrhoea. Disorders of bile, dysentery accompanied with blood (*raktatisara*) and the swellings of the liver—all of these respond well to the curative effect of these hanging roots. The leaves are salutary in healing sores, injuries and lesions. They are also useful in bile disorders.

Khajinul Advia is a reputed work in Yunani system. According to its opinion, banyan is an important astringent and constipative drug. It

cleanses the vitiations of boils, sores, eruptions and itchings and also the aggravations of *pitta*. The tender twigs of banyan scatter away the gases. These twigs are to be dried in shade, well pounded, sifted through a piece of thin cloth and then mixed with an equal quantity of sugar candy. This is to be taken for seven days along with milk as the first pinch in the early morning. Such a measure will reduce the thinness of the semen and also prove beneficial in reducing the burnings of gonorrhea and the kidney.

The regenerative and healing power of the banyan leaf are both vouchsafed well. In those cases of fresh injury even, where there is an urgent need for suturing the ruptured folds of the skin, all that is needed is to approximate these folds together properly, a large banyan leaf is to be then warmed up well and tied very firmly over this region by means of an appropriate bandage. Keep it as such, undisturbed and remove the bandage on the third day. The wound will heal up completely well and without any suturing whatsoever. Scald head or *garj* is a disease of the head where pimples appear on the scalp. Banyan leaves are to be burnt and mixed with linseed oil and applied over the head in this condition. The result is quite beneficial. Another very handy and useful ointment can be prepared in the following way. Select good yellow leaves of banyan that have just fallen on the ground. Burn them into an ash. Mix wax and ghee with this ash. Use this ointment

for applying over any type of injury; the healing will be quick and sound. Sprinkle ghee over a banyan leaf, warm it up well and tie around any morbid swelling; the inflammation would just sputter out and heal up. Dry the banyan leaves in shade. Grind them well, add sugar and let the patient take it in, as a pinch at the mouth. This is beneficial in leucorrhoea.

The bark of banyan is a well reputed astringent drug. This will reduce the burning of boils, the sores and the eruptions as well as abscesses. Start first taking the milk of banyan every day in the early morning before sun rise in a dosage of 3 *nashas* along with an equal quantity of sugar. As you find it favourable, increase the dosage by 2 *nashas*. If nothing untoward is seen, the dosage of milk on the eleventh day could be 10-11 *mashas*. After this, start reducing the dosage by 2 *mashas*. It will be just 3 *mashas* on the 21st day by this regimen. Then onwards stop taking the drug completely. By such a procedure, beneficial results are seen in all types of piles. This also confers a wholesome effect on thinness of semen, early discharge of semen and in the disease of *prameha*.

Placing a few drops of the banyan milk in the ears will kill any insect there. Boils or eruptions in the ears will also get healed thereby. Applying the milk on a tooth which is already shaking will enable it to be removed out easily. If morbid swellings are seen to be just about to appear anywhere in the body, applying the milk of banyan

there will arrest their further growth. Hard rheumatic swellings respond very well to a treatment by this milk; if they do not have too much of a vitiation, they just spread out and do not appear at all. If they have too much of a vitiation already, maturation is hastened, they break out soon and heal up, simultaneously.

Unripe fruits are dried in shade. They are ground well and drunk in milk. This will augment the urge of sex.

Yunani system considers banyan as strengthening to head. Camphor added to the milk of banyan and applied over swollen eyes, will quieten down however severe and advanced such a swelling may be. In tooth ache, it is advisable to apply the banyan milk all around the tooth on the gums. The milk of the banyan is considered as a specially strengthening drug material. Even seeds are regarded as cooling and strengthening. The aerial hanging roots are particularly useful in the two important venereal diseases of gonorrhoea and syphilis. They are also recommended in biliousness and inflammation of the liver. An application of the tender shoots are believed to be useful in destroying deforming freckles and spots of the skin.

Other Uses of the Banyan

There are many non medicinal uses of the banyan tree. A few of them are mentioned below.

Fresh sprouts, tender leaves and the fruits of the banyan have always served as food during the times of famine. In ancient times however, fruits and tender hanging roots did constitute choice foods for kings, royal persons and the *kshatrias* or the warring castes. In fact, to inculcate the warring spirit among such classes of people, these products of banyan tree were advised to be taken in almost in a form similar to the sacred *soma*. It was declared that a king who consumes while doing yagna the downward tender roots and fruits of the venerable *nyagrodha* tree, inculcates its spirit of steadfastness within himself. He gets established firmly and for long in his kingdom like this very banyan tree. These banyan products are therefore the most appropriate foods for the royal persons; so asserts the *Altareya Brahmana*.

From out of the broad leaves of the banyan, leaf plates for taking or serving food are stitched much as they are done from the leaves of *Butea frondosa* or *palasha*. These leaves are also good thatching material for preparing hutments. Young branches and leaves constitute a preferred forage material for the cattle. However, in some places, cutting them for such a purpose is resisted by the villagers themselves as they are the choice foods for the elephants. There is a belief however that the fruits of banyan act as poisonous material for the horses.

From the bark of the tree and also from the hanging roots, coarse fibres are extractable. These are used in rope making. In Assam, a type of paper is manufactured from the barks of the banyan.

By mixing one fourth proportion of mustard oil to the milk of the banyan and cooking the two together a sticky lace like material can be obtained. This is what the bird catchers employ to prepare their snares. An inferior variety of rubber can be secured from this milk. Abundant lac gets collected sometimes on the surface of the banyan tree. Even Atharva Veda mentions this situation; a number of trees such as banyan, peepul, *khair* (*khadira*, *Acacia catechu* Willd) are mentioned there to be the class of plants that produce lac.

The wood of the main trunk of the tree is porous, grey coloured and is of ordinary strength, hardness and durability. An interesting aspect of this wood is that it stands being soaked in water. As such it is useful in constructing wells. Minor wood articles and furniture such as doors, windows panels, frames, boxes, cases, cart, rafters, as well as a few agricultural implements are being made out of this wood. If the wood is cut i.e. planned carefully and seasoned also in an appropriate manner, good grain formation does occur in this wood; such a measure definitely increases the value of the timber from this plant. But this is carried out only rarely if at all. The implements and the articles prepared then would be correspondingly more praise-worthy. But the durability of the wood is not at all commendable.

The wood of the hanging roots and the trunks of the prop roots resulting thereby is harder than that of the main trunk of the tree. For constructing

tents, for making palanquins, for rafters of the boats, for decorative walking sticks and for the handles of ceremonial umbrellas, the wood from these prop roots is preferred.

In preparing many ayurvedic formulations of drugs specially of mineral or metallic ingredients, a technical and special procedure is followed. Ayurvedic works call this as an act of *maarana* or killing. This is what corresponds to calcination or a process of submitting a mineral or a metal to intense and prolonged heat till it gets reduced to a calx-a powdery remain. Banyan is useful in such a calcination of copper and other similar metals. To get a suitable and a much desired colour in the calcinated mica (*abhraka bhasma*) a decoction prepared from the tender shoots of banyan is employed. Calcinated silver and lead are also prepared with the use of the banyan produce.

A Few More Medicinal Preparations and Yogas

Banyan tree is a very readily available material almost anywhere. It is natural therefore that many recipes of diverse medicinal applications have been found out with banyan as a basic if not the sole ingredient. We have given a few of these above and include some more below. By no means does this list exhaust all the recipes that have been suggested or employed; but this is enough to indicate the range of the area covered.

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In Fever, Diarrohea and Vatic Piles

For all seasonal fevers, banyan offers a simple remedy. Take one *tola** of the stem bark of banyan and cook in 40 *tolas* of water. When the quantity of the liquid becomes reduced to 10 *tolas* add 1 *masha* of salt. One should drink this hot like tea three times a day. The fevers will disappear.

Three *mashas* of the powder of the dried root bark of the banyan is to be given three times a day with the water of rice wash or fresh well water. Quick benefit is seen in diarrhoea by this measure.

For blind piles, take 6 *tolas* of bark and boil in 40 *tolas* of water. When the latter gets reduced to half, cool, filter and add one *tola* each of ghee and unrefined sugar. Taking this drink in a comfortably hot form will give beneficial results in a few days.

To Improve the Power of Memory

Collect the banyan bark of a good quality, dry it in shade, powder it very fine and mix double the quantity of unrefined sugar or sugar candy. Store this in a clean container. Take 6 *mashas* of this powder in 20 or 40 *tolas* of boiled cow's milk twice a day in the morning and the evening. Do not consume any sour and acidic food during this period. By this measure the memory power will

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- * The modern equivalents of the traditional units of measurements referred in this Text henceforth are as follows:
1 *ratti* = 1 *gunza* (the weight of one seed *Abrus precatorius* or *gunza*); 8 *gunzas* = 1 *masha*; 10 *mashas* = 1 *tola*; 24 *tolas* = 1 *ser*; 1 *tola* = 10 grams; 1 *pau* = 1/4 *ser*.

increase in a *satwika* way and untoward thoughts do not arise at all in the mind.

In the Diseases of Children

Take the barks of banyan, peepul, gular (*Ficus racemosa* L), pilakhan (*plaksha*, *Ficus lacor* Buch), bamboo and jamun (*Syzygium cumini* L). Along with this take whatever you get out of the following: mulethi (*Glycyrrhiza glabra* L —liquorice root), majeeth (*Rubia cordifolia* L), lalchandani (*Pterocarpus santalinus* L), khas (*Vetiveria zizanioides* L) and padmak (*Prunus ceracoides* D. Don) All of these are to be taken in equal quantity. They are to be ground fine and applied over any region on the body of the child where a burning sensation is felt, or there is a boil, an itching, a painful wound, an eruption, an abscess or a redness. The child will get a sure relief. This is particularly beneficial in the eruptions of erysepelas (*visarpa*) that occur in the head region or at the region of the bladder of the child.

In Erysepelas—a Complication

Glandular swellings often appear as a secondary complication in erysepelas, a painful superficial, irregular and red eruption. For this particularly, the recipe suggested by Charaka using tender hanging roots of banyan, pith of the palntain and the like as noted earlier is believed to be specially beneficial. Instead of the lotus stalk or tuber, the use of gunja (*Abrus precatorius* L) is included as an

ingredient here in Vanga sena and Yogaratnakara. These two Texts recommend the following recipe in what is called as raktaja erysepelas (*phlegmon*) which is due to vitiated blood.

Take the bark of banyan and also the barks of gular, peepul, *plaksha*, bamboo and *lisodha* (*Cordia myxa* L). Take again whatever is available among the following: red sandal, *majeeth*, liquorice, *suran* (*Amorphophallus campanulatus* Blume) and *geru* (red ochre) in equal quantity. Mix the powders of both in a ghee, washed hundred times. Applying this will remove burning sensation, inflammation, dull pain, oozing and also the inflamed, swollen *raktaja visarpa*.

In Wounds, Swellings and Tumours

If any wound becomes foul smelling and maggot ridden, wash it daily with a decoction of the banyan bark and drop the milk of banyan three times a day on it. The maggots will die, the foul smell will disappear and a healthy healing, and granulation will come about, at the surface.

On swellings and tumours, first apply *kuth* (*Costus arabicus* Linn) or *saindhav lavan* mixed with the banyan milk. Over this, tie a thin piece of the banyan bark with a tight bandage. Do this twice a day. Continuing this treatment for seven days would resolve even advanced and big sized tumours. This is particularly advised for *rasauli*, a disease attendant with glandular swellings.

A good and productive way of collecting the banyan milk is to make a pit like depression with a nail at the base of a large sized branch the previous day evening after sun set. Close the mouth of the pit with a lump of jaggery. Sufficient amount of milk would have got collected the next day morning within this pit which is then to be gathered by removing the jaggery and placing a vessel suitably below so that the entire amount trickles down. Collection should be done before the sun rise. Collecting milk from tender shoots will not yield adequate quantity and will also be a wasteful procedure.

In the Diseases of the Eye

In the beginning stages of cataract formation (*motiya bindu*), applying the fresh milk of banyan of about 2 drops daily once in the morning and then in the evening for about two months is believed to be beneficial. This is curative for haziness of vision (*dhundh*) also.

A simple treatment for any injury to the eye is as follows. First give a fomentation with comfortably hot alum (*phitkar*) water. Do this about five times a day. Over the eye, administer now two drops of banyan milk as you get from a big sized leaf. Do this two times a day. Before going to sleep, tie lemon leaves after sprinkling ghee on it over the eyes. Carrying out this procedure for some days would heal any injury to the eyes.

For Cosmetic Purposes

To increase the lustre of the face, to remove disfiguring marks, freckles, black spots as well as an appearance of pimples on the scalp of the head and also abnormalites in the hairs, adopt the following measure. Take over-mature, yellow leaves of banyan. Along with this add equal quantities of the seeds of *nirgundi* (*Vitex negundo* L) *phul priyangu* (*Calycarpa macrophylla*, Vahl), *mulethi* (*Glycyrrhiza glabra*, liquorice root) lotus flower, *lodhra* (*Symplocos racemosa* Raxb), saffron and the root of *indrayan* (*Colocynth*). Grind them all together with water and apply this to the face.

Another recipe for the same purpose is to take the over mature yellow leaves of banyan. Along with this take the leaves of jasmine, red sandal, *Costus spectuosus* or *Kuth*, black *aguru* and *pathani lodhra* - all in equal quantity. Grind them together with water and apply to the face. This is particularly useful in black spots that appear on the hand or in *Tinea nigra* (*neelika*) a fungus disease.

Specially for the freckles of the face take the tender leaves of banyan or its tender shoots. Along with this take equal quantities of *costus*, *lodh*, *majeeth*, *phul priyangu*, *masur* (*Lens esculentes* Moen lentil), sandal and red sandal. Powder them all together and anoint the face with milk as the medium. Freckles will disappear and the lustre of the face will improve.

Bhava praksha gives a simpler version for the same results. This is to apply the paste of young banyan leaves or young tender hanging roots ground together with lentil in milk. This can be carried out as a regular practice. Or, it can be used as a massaging material.

To avoid premature greying of hairs or excessive hair fall, take young tender leaves of banyan. Wash them well in water, grind and extract the juice out. Take pure mustard oil in a quantity equal to that of the juice, mix them together and cook over a low fire. When you find that oil alone remains on the basin viz the whole quantity has become homogenous through out, remove from the fire, cool and store in a bottle. Keep applying this as a hair dresser. All abnormalities of the hair will disappear and the hairs will become strong and dense.

A procedure to render the hairs long and dense is to take tender hanging roots of banyan and an equal quantity of black sesame. Grind the two together to a very fine degree and then apply over the head. Let it remain so far half an hour and then clean the hairs with the comb and apply *bhangra* (*Eclipta prostrata* L) and cocoa nut flesh ground together in equal quantity. Follow this procedure for a few days. The hairs will grow long and dense.

For Sexual Vigour and Strong Off-spring

Select very good, fully mature fruits of banyan and pluck them from the tree. Do not use the fruits

that have fallen down on the ground. Spread such fruits in single file on a dry piece of cloth under shade and dry them thoroughly. There should be no contact with any metallic vessel throughout this procedure. After they are completely dry, powder them fine in a clean mortar of stone. Mix with this an equal quantity of fine powder of sugar candy. Store the mixture safely. Keep taking six *mashas* of this mixture in comfortably hot milk-morning and evening. This will remove thinness of semen, quickness of discharge or emission in sleep. For those couple who are childless solely because of seminal weakness, taking this medicine by both of them for three to four months, is a good and unfailing measure for securing a strong and healthy offspring.

Another recipe is as follows. Select banyan fruits as above. Select similarly peepul fruits. Dry the two together as above and powder fine. Take $2 \frac{1}{2}$ *tolas* of this powder, fry it in equal quantity of ghee, add $2 \frac{1}{2}$ *tolas* of sugar and 10 *tolas* of cow's milk and prepare a *halwa* (a sweet meat). Take this morning and evening for a few days. If along with this you can take milk of a freshly delivered cow it would be very salutary. If both of the couple adopt this procedure, securing a healthy and beneficial offspring is assured.

Yogas are compound preparations of many ingredients together. Advantages of utilising yogas instead of freshly prepared drugs are: convenience of use, greater reliability, easy procurability and a possibility of good and dependable storage.

Moreover they have been standardised by experts and handed down by tradition. They can also be commercially exploited as some of them have been actually utilised that way in modern times. Three banyan based yogas are given below.

1. *Nyagrodhadi Churna*: A powder of banyan and the like.

Take the barks of the following: banyan, peepul, gular, aralu, pita sal, mango, amaltas (*Cassia pistula*, Linn), jamun, chiraunji (*Buchanania lanzan* spring), arjun (*Terminalia arjun*), dhava (*Anogeissus latifolia* Wall) and mahua (*Madhuca indica* Gmel). Also take the barks of mulheti (*Glycirrhiza glabra* Linn), lodh (*Symplocos racemosa*), varun (*Cratogeomys nurvula* Buch) and neem. Take also the leaf of paraval, medhasingi and the roots of dantimul, chitrak (*Plumbago zeyanica* Linn) and arhar, and then the fruits of kvaranj and the three myrobalans. All of these are to be of equal quantities. Powder them together and store.

Take 1 to 3 *mashas* by licking it along with honey followed by a drink of the decoction of *triphala*.

This is for purification of urine and the destruction of all urinary disorders. Urinary pustules will not arise by its use. Thirst will get allayed. This is particularly useful in *bahu mutra* or polyuria, where there is excessive urine flow.

2. *Nyagrodhadi ghrita*: A ghee of banyan and the like.

Take the barks of banyan, *gular*, peepul and *sal*, and then *priyangau*, the kernel of *tad* fruit, the bark of *jamun* and *chiraunji* and *ashwagandha* (*Withania somnifera*). All of these are to be in equal quantities. Take one *ser* of them in total quantity. This is to be mixed with 16 *sers* of milk and 64 *sers* of water and then cooked on the low fire. When milk alone remains and the rest are all homogeneously mixed with it, filter and then convert it into curds and secure a ghee out of it thereby.

One to two *tolas* of it are to be eaten along with ghee again and rice.

This is for patients of injuries of the chest and seminal debility.

There are many, often very elaborate, ghees of banyan, useful in several diseases.

3. *Vata jatasava*: A spirituous preparation of the hanging roots of banyan.

Take 2 *sers* of the tender hanging roots. Cook them in 12 *sers* of water. When the quantity gets reduced to 4 *sers*, filter and fill it in a collecting vessel and cool. After it is fully cooled down add 3 *sers* of honey, 2-1/2 *sers* of sugar candy, 20 *tolas* of the flower of *ghay*, and eight *tolas* each of *naga keshar*, black pepper and *priyangu*. Then close the mouth of the vessel tightly and keep it apart. The *usara* or the fermentation drug is ready in 21 or 30 days.

This is to be taken in a dosage of 1 to 4 *tolas* daily.

The drug is advised for patients of urinary disorders, plethora (*rakta pitta*) and bleeding piles. This is of particular benefit for women suffering from excessive menstrual flow or menorrhagia.

B. THE PEEPUL TREE

In the land of Bihar which itself got its name as it was abounding in Buddha viharas and in the city of Gaya whose another name is Buddha Gaya, Gautama Buddha sat for the severe penance that gave him the enlightenment or Bodha he ardently strove for. He did so under the shade of a peepul tree growing there which became famous from then onwards and began getting called as Bodhi vriksha, the tree of enlightenment. It is by this name of *bodhi vriksha* that the tree gets called from then onwards viz from nearly 2,500 years ago in the extensive Buddhist literature and more or less in the Sanskrit literature as well. The fame of the tree for giving inspiration to contemplation on *dharma* and meditation became all the more since the times of Buddha. Goswami Tulsidas describes that the residence of his Kakabhushundi was the vast trees of the banyan, the peepul, the *plaksha* (*Ficus lacor*) and the mango that grew in the Himalayas. The saint poet was himself used to meditating on God sitting under a peepul tree.

It is not that the peepul tree became famous as such only after Buddha and the tree was not known earlier or was not worshipped earlier. On the contrary, it was always a well venerated tree and ample references for this occur in the earlier literature and even the Vedas. It is quite likely that since it was always associated with contemplation and sacredness and such a great tree was already available there, that Buddha sat under the tree and because of the knowledge he received thereby, it became all the more famous and venerated. The earlier and the more popular name of the tree is *ashwattha*. It is believed to have been so named because it was usual to plant this tree on the outskirts of a town ship or settlement and the travellers were habituated to tie their horses undreneath the tree where therefore these animals would stand (*ashva* is the horse; *stha* is the place of standing and shelter) and rest. The root of this grand tree is believed to be the very abode of Brahma, who is the source of its vitality. The sap coming from the root becomes sacred by yagna in the middle region, where the sustaining Lord Vishnu resides. The branches, the vast foliage and the fruit above this trunk constitute the final and the fulfilling stage where the Lord Maheshwara makes his resting place.

Near the great city of Anuradhapura in Sri Lanka stands a huge tree of peepul always humming with the chantings of the Buddhist Bhikshus and the devotees. One can consider that

this is one of the very old trees of the world whose age is historically vouchsafed with fully reliable evidence. According to the Buddhist work Mahavamsa, the Emperor of Sri Lanka, Devanampiya Tishya had requested the Monarch Ashoka to send him a branch of the peepul or the Boddhivriksha of Gaya under which Buddha had sat. Ashoka had sent this branch accordingly accompanied with his son Mahendra and the daughter Sanghamitra. The tree now standing is the direct growth of this branch. The peepul in Sri Lanka was henceforth called the Bo tree short for Bodhi vriksha. Even Botanically it is believed that the life of a peepul tree may easily extend to two to three thousand years. Though this is a good age in comparison to most trees, there do occur trees that have continued to stand alive and flourishing from still earlier periods. For instance the great Californian trees *Sequoia gigantea* which are gigantically tall are known to be of five thousand years of age. However even this record is beaten by a lowly looking tree belonging to the Cycadaceae family (to which the garden *Cycas* belongs) called *Macrozamia*; its age may extend upto twelve to fifteen thousand years!

It is because of such a long standing life, there is a tradition of planting a peepul tree as a memorial for any historical occasion. An important agreement took place between Maharaja Ranjit Singh and Lord Wiliam Benting in April 1838, and both the parties appended their signature to

the document concerned on that day. In commemoration of its and the ceremony thereof, a peepul tree was planted near Ropar on the banks of the river Sutlej. However, after a recorded presence of one hundred and twenty three years, in the floods of 1961, the tree was washed away.

It is very unlikely however that there is any tree in the world that is so much venerated as the peepul. For the Hindus as mentioned above, it is the abode of all the Trinity or *trimurti* of Gods, Brahma, Vishnu and Maheshwara. As soon as they reach the vicinity of this tree, Tibetans remove their headgear, honour it thereby and chant sacred incantations. They place a few pieces of stones at the base of the tree, colour the roots and worship just as it is done in India. The tree receives honour and veneration in all Buddhist countries, Sri Lanka, Burma, Thailand, Cambodia and Japan. Except in Japan where it is called *bodayi* (or buddha) *jew* (a tree), it is called as *bodhi vriksha* itself in all the other countries. The peepul at Gaya or the Bodhi vriksha is still a very much venerated tree for all the Buddhists of the world. Every pilgrim to Gaya carries a leaf of this tree as the grace of Bhagavaan Buddha and he cherishes to exchange such leaves amongs his friends and relatives.

References to the peepul in our literature are ample. It occurs in the Jataka stories of Buddha himself. Lord Krishna in Bhagavad Gita considers this as the most sacred among the trees; there is a

grand metaphor there comparing the whole cosmic creation to an inverted *ashwattha* tree. In Atharva veda it is proclaimed that *ashwattha* is the place of residence for the gods of the third heaven from here above. Padma Purana calls this as the king among the trees. There is a narration of a story in Taittiriya Brahmana, that once the Lord of Fire, Agni separated himself from the gods and hid himself in the form of a horse for a whole year in the peepul tree; this is why the tree became known as Ashwattha.

There are innumerable religious and auspicious ceremonies and functions associated with the peepul tree. On the occasion of establishing auspicious pots (*mangala kalashas*) in temples, it is the leaves of peepul that are placed in pots kept in the eastern direction. Since the trees of peepul, banyan, *gular* and *plaksha* were always apt to be planted and nurtured outside human settlements, these trees were believed in the vedic times to be the abodes of demigods such as Gandharvas and Yakshas as well as the heavenly damsels or the Apsaras. A regular ceremony of worshipping the peepul tree came into Vogue. The tree is to be worshipped in the morning and the evening and at no other time; the mantra for such a worship is quite interesting: "O Peepul, protect me soon from the (inauspicious) throbbings of my eyes and the arms and also from the prosperity of my enemy. You are the very Lord Janardana! Be propitious to me. Seeing you will remove all sins, your very sight

brings in all prosperity and perambulations around you will increase my span of life, Salutations to you”.

Sharnaga Dhara writes that whoever has planted a peepul tree, he will never go to hell, According to him this tree is to be planted in the southern direction of the house. Varaha Mihira, the great astrologer recommends the planting of the banyan and the peepul in front of the house to secure happiness and prosperity. Planting of a peepul tree is itself a great function to be attended with many ceremonies. In south India such a planting is often associated with the establishment of stones for serpent gods (*naga pratishta*). If a person carries out many such plantings of peepul for a number of times, he is enjoined to commemorate it with a gala function of final worship and devotion. The tree itself is decorated then with the placing in of a sacred thread (*yagnopaveetha*) much as brahmin is adorned with. At many places, a marriage ceremony itself is conducted for the *ashwattha* tree. The entire ceremony is conducted following all the procedures of a marriage in brahmin community. One can see a number of such evidences of marriage in South India in the form of a neem tree growing in close association with a peepul; such a coupled growth of peepul and neem is not accidental but deliberate.

All centres of pilgrimage are believed to be situated in the peepul tree. That is why all sacred and auspicious ceremonies are enjoined to be

conducted under its shade. The shelter of this tree is ever regarded as holy and benedictory. This was also the preferred public place for all religious discourses and discussions. Not for nothing is it so appropriately named in its botanical terminology; the tree is the religious *Ficus* or *Ficus religiosa*. The whole society was enjoined to nurture the peepul tree. It is ordained "To secure religious merit, economic prosperity, personal desire and final emancipation, one should water this tree daily specially in the month of *vaishakha* (the summer) as it is the image of the Lord Ashwattha Narayana. He who gives atleast a potful water in this way becomes free from generations of sins and goes to heaven". Its shade was always available to the weary travellers. There is also a custom of constructing a sitting platform of stones beneath the peepul tree. "What gift will not Lord Vishnu give to any one who does this public service of building stone platforms underneath the peepul shade" queries a traditional expostulation. It is because of this veneration with which the tree has been always held in the Indian mind, committing any injury to this tree is declared as an unpardonable crime.

Association of the peepul tree with ritualistic beliefs extend to prehistoric times. In a seal found in the relics of Mohenjodaro, there appears a figure of the peepul tree with seven gods and goddesses. Worshipping of the tree continues till date from these early times almost continuously. Many

festive occasions are related with this tree. On particular days this tree is regarded as the abode of the Goddess of Wealth, Lakshmi and then worshipped specifically. Perambulations around the tree are then under taken encircling the tree with thread once for each time chanting sacred mantras all the while. It is sometimes regarded as the abode of Lord Shani and worshipped specially by ladies. Worshipping the peepul on Somavati Amavasya and the perambulations carried out then have a special significance: that of securing good offspring.

There is some medicinal over - tone as well to some of these rituals and beliefs. Lolimbaraja, the author of a Medical Text, Vaidyaajeevana of Mediaeval times declares that keeping up a worship of the peepul tree certainly wards off the affliction of fever. In the times of Sayanacharya, the younger brother of the sage Vidyaranya who established the kingdom of Vijayanagara, the tree of peepul came to be predominately associated with Witch-craft and sorcery. There is an incantation in Atharva Veda of eight mantras which Sayana has commented as having been applied for such purposes.

The most persistent of the probably prehistoric beliefs is the association of fertility with the peepul trees. Perambulations around the peepul tree at the outskirts of the village continues to be even now quite a common ritualistic procedure observed

religiously by ladies ardently desiring for an offspring.

The Plant of Peepul

Like the banyan tree the huge peepul starts its life from a very minute seed falling in the crevices of some other tree, growing steadily with that little water and soil itself, reaching to the ground in course of time and ultimately smothering the tree which had given its support to start with. It is thus what is technically described as an epiphyte—a plant which grows on other trees purely for physical support and not deriving any nutrition thereby as a parasite does. Another favourite habitat of the tree, again like the banyan, is any small crevice on a building, a fort or any huge structure, specially some odd inaccessible corners of it. Growing from there it is likely to destroy the support on which it established itself initially. Both the peepul and the banyan are therefore regarded as enemies of the house, *griha shatru*.

The plant, again like the banyan, is a native of the Sub Himalayan range but occurs widely now almost everywhere in India and Burma, though its presence is not much prominent in very dry places. It is common in the most South Asiatic Countries. It is basically a plant of wet places where there is much rain fall. For this purpose it has a very interesting and an effective adaptation. The leaves are shining and wax coated, essentially drooping down and very characteristically provided with long

drawn out tail like an arrow and pointed viz acuminate, tips. As such the water falling on them does not stick there; it quickly flows down instead, aided by its tail like tip thus never interfering with any breathing and the intake of oxygen by the leaves.

Peepul is a huge, vast, long lived, milky tree with many, extensively spreading branches. Leaves are numerous, leathery, waxy, shining and provided with a rather longish slender leaf stalk and a wavy margin; they are thin, with an upper surface dark green in colour and a lower surface rather pale green. Hanging on their slender stalks the infinite number of the leaves of this large tree always seem to flutter, tremble and dance even for little winds. They shine all the while therefore as they face glistening sun alternately and create an eternal humming murmur as their leathery blades, specially their long tips rub against one another dripping the rain drops down. It is this habit of the tree that makes it a grand and a spectacular plant. Poets of south India compare the sound to the music of *veena*.

Coupled with this, the superb tree offers a vast cool shade and an endless feast of an infinite number of fruits. Invited by this bounty, numerous birds of various kinds are always found in a warbling multitude increasing the grandeur of the very vicinity of a peepul tree. Naturally peepul has been the source of inspiration to many a poet and a typical representative of an Indian scene.

The most ancient and the famous name of this tree is not *ashwattha* but *pippala* whose corrupt form is peepul. The fruits of this tree had been a favourite food of the sages of Vedic India during their penance. Those who led their life by eating them were referred to as *pippalaada* the eaters of the peepul fruit. There were many *rishis* of this Pippalada name who spent their lives in Vedic studies.

Sanskrit gives a long list of names to this revered tree of religion, *keshavalaya*, *krishna vasa*, *achyuta vas* (where the Lord Achyuta resides), *ashwattha*, *bodhi dru*, *bodhi druma*, *chaitya druma*, *chaitya vriksha*; *chala dala*, *chala patra* (with fluttering leaves), *dhanur vriksha*, *gajabhakshaka*, *kunjarashana* (whose leaves form fodder to the elephant as it is going about), *kapitana*, *kshira druma* (milky tree), *mahadruma* (the great tree), *naga bandhu* (where serpents resort to), *mangalya*, *shri*, *pavitraka*, *shubhada*, *shuchi druma* (auspicious and clean tree), *pippala*, *yajnika* (whose twigs are employed in sacrificial rites) and so on.

In English it is Pipul tree, Bo tree or the Sacred Fig.

In Bengali, it is *asvattha*, *ashathwa*, *asud*; in Kannada *arali*, *aśhwattha*; in Hindi, *pipal*, *pipili*; in Punjabi, *bhor*, *pipal*; in Malayalam, *arachu*, *araya*, *ashwattham*; in Marathi, *pipala*, *ashwattha*; in

Tamil, *arasu*, *asuvattam* and in Telugu, *ashvaddhamu*, *bodhi*, in Urdu, *pipal*.

Botanically, the tree is called *Ficus* (fig) *religiosa* (of religious significance) Linn.

The bark of the tree is whitish grey. As the tree gets old, the bark cracks at intervals and gets clothed with papery superficial layers. Branches are long, thick and spreading out in all directions. Leaves are thin, base of the leaf is broad, rounded but sometimes heart shaped in young leaves. Leaf blade is 5.7 nerved. The lateral main nerves are about 8 pairs and these have a very fine net work of innumerable small veins in between. The height of the tree may go upto 80 to 90 feet. The spread of the root within the ground with its many reamificatous extends for quite a great distance. Like the banyan there appear hanging roots for the peepul also from its main trunk as well as the major branches. However unlike as in banyan, they are never very long or thick and do not reach the ground to produce prop roots and thus increase the lateral spread of the plant. They are called the beards of peepul. Milk or latex of the tree comes out by any small injury or incision at the young leaves, branches or the main trunk; it is sticky and white. In old trees lac gets formed and collected at the surface of its smaller branches.

The tree is deciduous, the entire foliage falling down in season within about a fortnight leaving only the branches and their sub branches. But

from the month of *magha* to *chaitra* (viz. November to January) fresh leaves start coming. And, these young leaves remain for quite a few days in a reddish hue, silkily tender, smooth and slippery, making the entire tree picturesquely impressive at that time. Soon, however they turn to their adult shining greenery.

The flowers are small, unisexual and enclosed within the characteristic cup of hypanthodium as in the banyan. These occur in pairs and are stalkless, smooth, globose but rather depressed at the apex. They become dark purple, sweet and edible when ripe.

Medicinal Importance

Like the banyan tree again, there exist many medicinal uses for the peepul. Infact, an acquaintance with the medicinal lore of these two very similar and very easily procurable and abundant source would be highly instructive. Very practicable and effective as well as simple remedies have been suggested and actually employed with peepul as the sole or the main ingredient. There are many house hold remedies, folk lore employments and also officinal ayurvedic formulations based on peepul. There is an extensive discussion of the plant in ayurvedic literature. There also exists a considerable amount of modern studies of this reputed plant. We shall attempt a brief summary of this vast information

highlighting those that are simple, well known and much reputed.

Though it is the root bark of the tree that is considered to be the officinal part of the plant, many other products of the plant are also medicinal. Effectiveness of some kind or the other is attributed to almost all of them viz leaf, milk, tender shoots, stem, bark and the fruits.

A generalisation of the medicinal properties of the peepul is as follows:

It is heavy in nature and dry. Its taste is astringent, post assimilative effect or *vipaka* is bitter while the virility is bitter. It assuages aggravations of *kapha* and *pitta* and has an action of colouring or pigmenting (*varnya*). Therapeutically it has an efficacy of arresting pain (*vedana sthapana*) and removing oedematous swellings (*shotha hara*). It is useful as a remedial agent in *rakta pitta* or plethora and the aggravations arising from *kapha*.

We shall first discuss the use of peepul with reference to some specific diseases.

In the Diseases of Urineogenital System

Charaka classifies peepul under *mutra sangrahaniya* drugs which specialise in conserving urine and are therefore of particular effectivity in rectifying disorders of urinary system. Gonorrhoea is a dreaded venereal diseases spreading though

sexual intercourse and represents a contagious infection of the mucous membrane of the genital tract. It is due to a bacterium called *Gonococcus*. A typical symptom is the discharge of pus during urination, aptly called *puya meha* (pus urine) in ayurvedic works. Bark of the peepul is employed in curing gonorrhoea as well as in other cases of *puya meha* also.

In urino genital diseases due to *pitta* vitiation Charaka advises to give the patient a drink of the decoction of the bark of the peepul tree mixed with honey. For a person suffering from seminal debility or where there is an injury at the chest, the following measure is suggested. Boil milk with a decoction of the bark of the peepul. Convert this milk into curds and then into ghee. Cook rice in this ghee and let the patient eat that rice.

Six *mashas* of the peepul seeds are to be pulverised fine in a mortar using the horns of the deer as the pestle. Sprinkling a little bit of *lassie* or sweetened butter milk will aid in such a pulverisation more quickly. Add honey and drinking it along with *lassi* is beneficial in all types of urinary dysfunctions. If urine happens to be bluish in colour, Sushruta advises the consumption of a decoction made up of the root bark of the peepul.

As a Nourishing Food for Development

Take tender shoots of the peepul. Cook them in milk and add a little sugar as suitable to your

taste. This itself constitutes a very nutritive morning drink. Atharva veda describes that the peepul tree growing epiphytically on a *shami* tree (*Prosopis spicigera* L. *sami* in Hindi) was being utilised in *pumsavana* - a ritual meant for securing a healthy male child and he also asserts that such a birth was actually taking place in that way. Sushruta opines that the drinking of the following would make a person virile like a sparrow: Cook the fruits of peepul as well as its bark and tender shoots in milk and filter. Drink this then after sweetening it with sugar and honey. Hakims of Yunani system consider the root bark of peepul as a virilifying (*vajikarana*) drug and also effective in shooting pains at the loins. The advice given for those women whose offsprings die prematurely and whose milk gets bad, is to drink a fresh extract of the hanging roots or the beards of the peepul. Normally very few peepul trees develop such beards. That is why they were always in great demand by the physicians. A parasite (*vanda* in Hindi) grows on the peepul tree. This is to be boiled in milk and given to a woman who has a tendency for abortion; the foetus will stay on and develop into a healthy child. Another and a much simpler remedy advised for the same purposes is: the fruits of peepul are to be dried and powdered, and a pinch of it is to be taken with water for fourteen days. The chances of non-abortion are greatly increased.

For many vaginal diseases, a decoction of the bark of peepul is employed to cleanse the vagina and wash.

In the Diseases of Stomach

Even intolerable and severe pain of the stomach gets relieved by a drink of a decoction of the bark of the peepul tree added with a little bit of salt and jaggery. A recommendation of an ayurvedic author Chakrapani is: the dry bark of peepul is to be burnt and then cooled by dipping it in water. Filter this water and drink. By this, one can get rid of frequent vomiting and repeated belching and also hiccup. Uncontrollable thirst will also get quenched, thereby. This is particularly useful in checking excessive vomiting of the pregnant women.

Charaka advises the use of the peepul bark as a disease preventive enema. For this purpose the bark is cooked in water which is then cooled and filtered. For a patient of *kapha* aggravation, an enema is given with this decoction adding a little of salt, honey and oil. The decoction is to be slightly warm and the patient should retain this within, for sometime. For a patient of a *pitta* aggravation the decoction is given in a cold manner adding ghee and honey.

For infections of the parasitic bacteria *Staphylococcus aureus* and *Escherchia coli*, a water

extract of the bark is considered to act prophylactically viz. preventively.

Charaka prescribes taking a ghee prepared with sandal wood and other ingredients (*chandanadi ghrita*) for a patient of sprue, a tropical disease that affects mouth, throat and digestion. Peepul is an ingredient of this ghee. For checking loose motion a gruel (*yavagu*) or a *khichadi* prepared with the young sprouts of peepul is given as meals. After the chyme is digested here, the patient is to be given milk cooked with a decoction of the peepul bark.

In case the stools are of yellowish red colour and are accompanied with much pain or burning, giving the patient a *sag* or *curry* prepared of young tender leaves of peepul proves beneficial. This checks much secretion and oozing of mucous matter. An enema given with the sprouts of peepul cooked in milk and filtered, is very advantageously employed in dysentery, prolapse of the rectum, haemorrhage and fever.

In Fever and Small Pox

Peepul is effective in burning fever because of its cooling nature. Burn the bark fully into ashes. The ashes are then sieved with a fine piece of cloth and sprinkled on the bed of a small pox patient, who is then asked to lie down on it.

If the eruptions of small pox are burning, prepare a paste out of the hanging roots of the

banyan, the bark of the peepul tree and the bark of the neem tree. With this paste a massaging is to be done for the patient carefully.

In Cough and Asthma

For an asthmatic patient, the powder of dried fruits of peepul is given with water.

A patient of cough is advised to take the same by licking it up with honey.

To Prevent Bleeding

A patient of *rakta pitta* or plethora has a tendency of spontaneous bleeding at several places for eg. at the nose or the rectum. Peepul is utilised in many ways to give relief to such a person. An anointment is prepared by rubbing the bark and applied. He is asked to take a bath with its decoction or he is made to sit in a tub of its decoction. Or the decoction of the bark is given cooked in ghee or oil. Another measure is as follows. Bruise the sprouts of peepul and keep them immersed in hot water for twenty four hours. Cook this water with ghee. Mix one fourth part each of honey and ghee to this preparation and give it to a patient of plethora, as an electuary which he is to take by licking.

In the Diseases of Rectum

The following remedy is seen to be quite beneficial in anal fistula—a long narrow pipe like

ulcer at the anus, quite painful and troublesome, called *bhagandar*. The powder of dried bark of peepul is kept at the end of a tube and blown within the rectum so as to come in close proximity with the ulcer. The powder is seen to be beneficial in any type of wound; even rotting wounds respond well. This also acts well in treating goitres.

There is a ghee prepared out of *sunishannaka* (*Marsilia*) and *Changert* (*Oxalis*) advised for bleeding piles. Charaka advises the sprouts of peepul to be added with this ghee as an ingredient.

For Rheumatic Pains

Drinking a decoction of the bark adding honey is recommended by Charaka as a sure cure to alleviate even very severe rheumatic knots (*gout* or *vata rakta*).

Yunani physicians employ the bark in treating glandular knots and inflammations of the throat. Both Charaka and Vagbhata advise an anointing of a paste made up of finely powdered bark of the peepul and ghee, to lessen down and get a relief for oedema, a pathological accumulation of fluid in tissue spaces.

For Erysipeals

Kashyapa advises that the region of eryspeals is to be treated with an ointment made out of the powdered bark of the peepul with ghee washed for hundred times. A similar external application is

advised, consisting of a *kalka* or paste prepared out of the tender leaves of peepul and its bark mixed with ghee. An ointment of the bark with ghee greatly relieves the intense burning associated usually with this affliction and so also the severe looking redness.

In Bolls, Eruptions and Injury

In eruptions, the bark of the peepul is rubbed on a grind stone with water and the paste is applied gently. This will aid in maturation and healing. A tying of the leaf of peepul at the region after slightly warming it up is also seen to be beneficial.

The lac that gets collected on old branches of the peepul tree is seen to be useful in treating injuries. It fills them up quickly and heals. If injured regions are washed in a decoction of the peepul their healing is hastened. Fresh injuries are best treated by an application of fresh leaves of the peepul well ground down and pasted over. Wounds are first cleaned and then the broad tender leaves of the peepul are tied over them. If scar tissue has not become formed in the injured region and the wound is still fresh and unhealed as yet, sprinkling and dusting it with the fine powder of dried peepul bark will hasten up the process and a healthy skin soon closes the injury. In order to bring back the natural colouration to this fresh skin, an application of the following is advised: the bark of peepul, *dhyamak*, the root of *jala vetas*, *svarna gatrik*, lac, *naga kesar*, *tutia* and *kasis*.

If there is a burning and eruption following an injury, dusting them with the powders of dried bark is very much desirable.

For corns in the feet or in cases of rupture of the skin, application of the milk of peepul will prove beneficial. A patient of itching and eczema is advised to drink a decoction of the peepul bark.

In Diseases of the Mouth

It is a practice in Sri Lanka to use the bark of the peepul tree in most diseases of the oral cavity.

Grading with a decoction or a cold infusion of the bark of the peepul will strengthen the gums, heal them and offer a good relief even in severe toothache.

Growing children often suffer from frequent incidence of sores, inflammations and apthae of the buccal cavity. Apthae are circular whitish sores on the surface of the mucous membrane of the buccal region. A favourite and effective remedy is to grind the bark and the tender leaves of peepul to a very fine degree and apply it with honey on the inside of the mouth.

In Ear Ache

Take tender young leaves of peepul, grind and cook in gingiley oil on low fire. In cases of ear ache, a small quantity of this oil is to be poured in the paining ear after making it comfortably hot.

Vagbhata offers the following remedy for diseases of the ear: Sprinkle a little bit of oil on tender peepul leaves. Apply over this a pinch of saindhav salt. Fill them in a small earthen pot and close its lid with a wet flour so tightly that no crevices are left. Place the pot on a fire of charcoal till such a time that the leaves will melt down. Remove from the fire, cool and then squeeze out the juice from the leaves.

A dripping of a few drops of this extract into the aching ear will give a definite relief.

For Treating Elephants

Charaka mentions that peepul is used in giving enema to the elephants.

Shalihotra, the author of Palikapya an ancient work on veterinary medicine advises that if there is a disease of hearts in an elephant, giving a decoction of the barks of peepul is the best medicine.

Medicinal uses of Individual parts

We have given above a short list of some medicinal uses of the peepul. We shall discuss below a more elaborate account of the multifarious medicinal uses of the plant.

As stated already the bark of the tree is the most widely used part of the tree though some medicinal

efficacy or the other is attributed to almost every part of the plant also.

The Bark

General properties of the bark are as follows: in action, it is styptic (i.e. astringent and constricting together), contractive, conservative for blood (*rakta samgrahaka*), nourishing and destructive of *kapha* aggravation. It helps in retention of the foetus by checking abortive tendencies and is also a virilifying drug. It is beneficially employed in the diseases of oedema, ulcers and wounds, anal fistula, vomiting, dysentery diarrhoea, affections of blood, gout and urinary and urinogential dysfunctions.

Decoction of bark, better if it is of the root or its cold infusion is found to be beneficial in a number of ailments: urinary disorders such as difficulty in urination and chronic urinary disorders; erysepeals and burning sensations; skin diseases like ringworm, eczema and itching; cough and whooping cough of children.

For a patient of gout (*vatarakta*), take five *tolas* of the bark, cook it in five *sers* of water. When the quantity of the latter is reduced to 10 *tolas*, filter, add a little honey and let him drink half of it in the morning and the other half in the evening. This will cure violent rheumatism even wherein aggravations of all the three *doshas* occur.

If a patient is suffering from severe non retention of even liquid food which tend to come out by immediate and repeated vomiting, employing the inner bark of peepul will prove much beneficial. The bark is to be dried in shade and powdered fine. This is to be licked along with honey repeatedly in a dosage of 4 to 8 *rattis*. By this procedure, such an emesis or vomiting if it is due to *kapha* aggravation will definitely be cured. For an emesis of *pitta* origin or one which is due to fever, you should add a pinch of unrefined sugar with the above powder and keep taking it in frequently through the mouth or licking it up as an electuary with honey.

For hiccup, burn the roots of the peepul to ashes and homogeneously mix it with water and let the patient keep drinking it in small sips. In addition, the burnt bark can be extinguished by sprinkling water over it and after it cools down it may be mixed with conjee and applied over the chest.

In treating wounds of various types the bark of peepul is employed in several ways:

Sprinkling and dusting of wounds, sores, ulcers, anal fistula and goitre, whether old or new with a fine powder of the dried inner bark of the peepul tree is always attended with a good result. This is to be done three to four times a day. Clean the surface with cotton before sprinkling. The beneficial effect is clearly seen within eight to ten days. Another remedial agent for the same purpose

is the following. Old peepul trees develop on the surface of their trunk and thick branches a thin papery cover over the bark. This is to be taken, dried and powdered fine and stored. Over the wounded region, first smear a thin layer of gingely oil and then sprinkle this powder to such a degree that a thick layer of it gets formed there. If the discharge of the wound comes even above this layer, apply the oil again, followed with another thick sprinkling of the powder. By this measure even such a severe wound that does not get filled up and healed easily in normal circumstances shows clear signs of regeneration and quick healing.

For a scalded region or a burnt skin, where the wound has reaptured, sprinkling of this powder will prove beneficial. Or, ghee can be added to sprinkling. For a wound due to burns, prepare a decoction of 8 *tolas* of the bark and filter. Add 8 *tolas* of coconut oil to this and cook again. When only oil seems to be remaining, add a *tola* each of country wax, camphor, and *sindhur* (red lead). Store this in a clean bottle. Smearing this for injuries, wounds and ulcers is highly relieving and also curative.

The powder also forms a good veterinary medicine. It is satisfactorily applied for healing all kinds of wounds and ulcers of animals.

An ointment for boils, eruptions and lesions can be prepared from the peepul as follows: Take 5

tolas of powdered resin, mix it with 10 *tolas* of mustard oil and cook them together on low fire. When the two mix up homogeneously, drop 2-1/2 *tolas* of the ashes of the inner bark of the peepul, stir well and prepare the ointment. Be applying this ointment repeatedly. For boils and abscesses, smear the ointment and give a bandage. It very often happens that on removing the bandage even after a one time application, they would have burst out and healed. There would be no need for a second application, at all!

Another way is to keep applying the bark after rubbing it in brick water. For rotting wounds and ulcers that do not get filled up by other treatments, the inner bark is rubbed in rose water and applied. They will soon become clean and heal up. This procedure is seen to be particularly beneficial in goitre.

For ulcers which have become infested with maggots in any domesticated animal such as cows, oxen, buffaloes and the like, a bread (*roti*) is prepared out of *jawar* in which the powder of the peepul bark is mixed and given as a feed. The results are effective and satisfactory.

For the health, upkeep and also as a medicine for teeth, the peepul bark finds an application as follows:

Keep a ready stock of the bark dried in shade and powdered. Use this as a tooth powder twice a day, morning and before going to bed at night. This

will obviate shaking teeth, aching of the teeth, as well as impurities and infections of gums and teeth.

Habituating oneself to use the fresh and tender sticks of peepul tree as the tooth brush (or *datur*) is particularly beneficial. Teeth will become strong and firm, swelling or pus formation at the gums will disappear and the bad odour of the mouth will vanish. Even eyes are believed to become lustrous thereby!

For the health of skin and its diseases the bark is employed as follows:

The bark is to be rubbed in water and applied. Or, the ashes of the bark are to be mixed with half the quantity of lime and the two together are to be homogeneously mixed with butter and applied. This is seen to be beneficial in itching, eczema, and many other minor diseases of the skin. During very painful, troublesome and weeping eczema, which is always giving out a discharge, cold infusion of the peepul bark is given as a drink. Another measure is to powder together the bark and the leaves of peepul, cook them in coconut water and apply.

A very interesting use of the bark of peepul is in connection with some psychological disorders. A few such beneficial applications are as follows:

For nervous debility, take ten *tolas* of young tender twigs of peepul, cook them in half a *ser* of cow's milk, and after it has boiled over 3-4 times

remove from the fire, cool it down and filter. Add sugar candy as per taste and drink. Most cases of nervous debility respond well to this simple remedy. This is a good brain tonic for ordinary individuals also.

Another recipe is to take young tender leaves of peepul in the required quantity. Dry them in shade, cut into thin pieces and store in any desirable container. Take about 4 *mashas* of the material, cook in a *pav* of water and remove from the fire when the quantity of water is reduced to half. Add sugar and milk and drink like tea. This can be cultivated as a useful habit.

For weak memory and mental confusion, take fresh barks of peepul. Dry them in shade, powder and store suitably. When the occasion arises cook them in water as above, add milk and sugar and take like tea morning and evening. This will increase memory and strengthen the mind.

For confusion and insanity, take ten tender young leaves or twigs, cook them in half a *pav* of milk till the milk gets wholly condensed there itself. Give this to the patient to eat. This is presumed to be a simple but useful remedy.

There is a formulary or yoga called *peepalavaleha*, an electuary prepared with peepul as the principal ingredient. This is how it is prepared. Take the *panchanga* or the five organs of peepul (leaves, root bark, fruit, the tender shoots and the beards or the hanging roots). Pound them

together and well. Keep the whole material soaked in sixteen times the quantity of water for twenty four hours. Then cook on fire and when the water gets reduced to one fourth of the original quantity, remove and then once again cook it in steam so that the substance becomes thick and opium like. This *avaleha* is presumed to be a great elixir. It can be rendered into a syrupy consistency and decorated as well, with silver foils and made into pills. One to two pills are to be taken with milk at night. This is prescribed as an effective cure for all cases of nervous debility, weakness and wanderings of memory, mental confusion and mild insanity.

For cases of swooning, peepul has been used as an effective remedy. For this purpose a few drops of the peepul added with an equal quantity of honey is applied on the head. The patient is expected to come out of the unconscious state almost immediately.

For diseases of children, there are a few specific preparations:

If a child suffers from fever specially due to the aggravation of *pitta*, its demand for water becomes excessive. The thirst it has becomes unquenchable and it goes on protruding its tongue outwards, cries continuously and does not rest even for a moment. Under such circumstances the following remedy proves effective. Take six *mashas* of the ashes of peepul bark, mix them well in ten *tolas* of

a distillation (*arka*) of *gaujavan* (*gojihva* or *Onosma bracteatum* Wall) or ten *tolas* of well boiled water (if the latter is not available), remove out the scum if any, on the surface and give this to the child to drink. Quite soon, the thirst gets quenched. For sores in the mouth of the child, a very frequent complaint, powder of the bark and leaves of peepul is applied with honey.

Diptheria (*rohini*) is a prevalent affliction of children. It starts as a redness on the inside of the throat, a white fold appears at the base of the palate, a swelling and pain at the throat follow, succeeded by fever, slight cough, gurgling sound during breathing, insipidity in taste, augmented fever and swelling of the throat, pain in the ear and redness of face - such is the course of diptheria in a child. This may occasionally lead to death even. The cure advised is: to secure freshly extracted juice of the inner bark of peepul and its tender leaves, add honey and make the child lick it up at frequent intervals.

For spasms and convulsions of children which arise by violent involuntary contraction of the muscles, prepare a very fine powder of the tender hanging roots of peepul, mix it very homogeneously with an equal quantity of saffron (*keshar*) and give this in a dosage of 1 to 2 *rattis* at intervals of half an hour. Convulsions will get quietened soon. Another measure is to grind the peepul bark in a little quantity of water, secure the juice thereby

and prepare its decoction. Add honey and give. This is advisable even for convulsions in adults.

For gynaecological disorders, there are a few special recommendations

A decoction prepared from the bark of peepul along with the bark of tamarind or freshly extracted juice itself of the two is given as a drink for patients of difficult menstruation, or even absence of menstruation.

For pregnant ladies who have a tendency or fear of abortion, six *mashas* of the powder of the bark of peepul is to be given along with a decoction of the rind of orange fruit. This is to be continued for a week giving the medicine 3-8 times a day. If they suffer from any swelling or any other troubles at the breasts, burn the bark of peepul and drop it in water. Then take a piece of metal, heat it again and again and dip it as repetitively within this water. Take now the root of *indrayan* (colocynth), rub it in this water and apply over the breasts.

Hanging Roots or the Beards of Peepul

During pregnancy many have a tendency of getting into hysteria, a psychoneurotic disease (i.e. that which has its basis in the mind as well as the nervous tissue) characterised by an extreme degree of emotional instability, an intensive craving for affection and an outbreak of wild emotionalism.

For this, select the thin tender hanging roots sprouting from the main trunk or the joints of the

branches of a peepul tree and take about 2 *tolas* of them, cut and pound them very fine, mix with it homogenously a *tola* each of *jatamansi* (*Nardostachys jatamansi* DC) and *javitri* or nut meg (*Myristica fragrans* Houft). Add 1-1/2 *masha* of *asturi*, add a little water. One to four pills of the drug is to be given with cold water three times a day and after half an hour a drink of milk or a drink of thin rice cooked in milk is to follow. This is to be continued for one to two months. During this period, the patient should avoid all *vata* aggravating substances, too bitter or hot foods and try to keep the mind tension free.

For avoiding the risks of abortion, 2 *tolas* of fresh tender hanging roots of the peepul are to be taken pounded and cooked in 40 *tolas* of milk. When this gets reduced to half the quantity cool it, filter, add honey and sugar. Give this starting from 6 to 6 days earlier than the commencement of menstruation and continue to do so for 10 days morning and evening. This measure is presumed to be so effective that even a barren lady is expected to become pregnant! But it is to be seen that there are no uterine dysfunctions that would preceitate abortion during this regimen; if so, that has to be treated first. Another recipe for the same purpose and equally effective is: to take 2 or 3 *tolas* of the tender sprouts of the hanging roots, grind them in raw (i.e. unboiled) milk and give this to the patient 6 days earlier to menstruation and continue for a

fortnight giving it every day once in the morning. This procedure is to be followed for 2 to 3 months. The results are satisfactory.

For renal pain (i.e. pain in the kidney), it is believed that smoking the dried hanging roots through a *chilam* will be effective quickly.

In cases of typhoid fever, just prior to the expected onset of fever about an hour earlier, chewing the fresh sticks of hanging roots of peepul and sucking the juice thereof is believed to stop the onset that day itself.

For inflammation at the mouth and sores on the tongue, take 3 *mashas* of the hanging roots and one *masha* of the smaller cardamom, grind them in milk and apply over the tongue. This will cure many ailments of the buccal (mouth) region and its membrane.

Leaves of Peepul

General properties of the leaves are: regularatory (*anulomika*), astringent, (constrictive and healing) and counteracting to poison. Young sprouting leaves and tender twigs are prophylactic (i.e. preventive) to many diseases, and are particularly useful in curing skin diseases and also the diseases of blood and urinary disorders. Making a habit of chewing a little bit of peepul leaves or twigs daily is specially beneficial; many aberrations of the body can be prevented thereby.

For glandular swellings the peepul leaves are warmed well and tied. This simple measure will quieten down the swellings. Crushed leaves are applied over any fresh injury or rupture; this will give a quick relief. Smear the peepul leaf with a little bit of castor oil, warm it up well and tie on any morbid swelling accompanied with painful and burning sensation; this is particularly useful for thread worm swellings, - the worm will come out quickly. For pains of any hit injury, take 11 leaves of peepul, crush them well, mix an equal quantity of jaggery, make the mixture into seven pills and give it to the patient for a week.

Yunani physicians advise the following for anaemia (lack of sufficient blood and the attendant pallour on the face and the body). Take 5 to 7 leaves of peepul and an equal quantity of the leaves of *lasud* (*Cordia myxa* L). Both are to be powdered and mixed well. Add a little salt and give it as a drink for ten days to the patient.

Another yunani prescription based on leaf is concerned with the enlargement of spleen. The peepul leaves are to be dried in shade, powdered fine, and then mixed with jaggery and rendered into pills of the size of a ber fruit (*Zyziphues*). This is to be given morning and evening along with a distillation (*arka*) or *saunf* for about 14 or 21 days.

Urinary disorders are often accompanied with excessive and intolerable burning. To assuage it, seven tender green leaves of peepul are taken; they

are then ground in 40 *tolas* of water, filtered and given as a drink adding a little amount of sugar candy. The delicate leaves of peepul are to be burnt to ashes, and then sieved over a soft piece of cloth. Dressing wounds of any kind with this powder is seen to be beneficial. One part of the freshly extracted juice of the leaf is to be mixed in with six parts of myrrh or *hira bol* (*Balsamodendron myrrha* Neils) and two parts of honey. All are to made homogenous. A drinking of this in a suitable dosage is advised for a patient of *rakta pitta* or plethora.

Leaves are also utilised as virilifying (*virya vardhak* and *vajikarana*) agents. Take 40 *tolas* of tender twigs of peepul and cook them in 4 *sers* of water till the quantity of the latter gets reduced to one fourth, cool and filter. Add 2 *sers* of sugar and cook again to a syrup like consistency. When there is a homogenous mixing, remove from the fire, cool and close the lid and keep it in a safe place for seven days. Eat this *murabba* morning and evening in a dosage of $2 \frac{1}{2}$ *tolas*, followed by a drink of 1 *pav* of milk mixed with 5 *tolas* of butter and sugar candy.

In dysentery accompanied with blood a simple recipe advised is to chew the soft leaf stalks of peepul along with coriander and sugar in equal parts and go on taking in the juice secured thereby. Or, powder all of these together to a fine degree, keep this powder in the mouth and go on

sucking in the juice. The leaves are usefully and effectively employed in stomach pain, indigestion and any other disorders of the stomach as well. About three leaves of the peepul are to be ground, jaggery is to be added and the entire mass made into pills and given. Or, shade dried leaves of peepul are to be powdered, jaggery added and then made into gram (*chana*) sized pills. These are to be given at a dosage of one pill each time along with a distillation of *saurf*. If it is a question of severe constipation, 2 pills are to be given at night along with warm milk.

Green, fresh leaves of peepul are to be pounded, mixed in eight times of water and then cooked. When the quantity gets reduced to one fourth, remove from the fire, cool down and then once again cook. When it becomes very thick add an equal quantity of sugar candy powdered well. Remove from the fire after there is a thorough mixing. Cool and store in a safe place. This is to be given in a dosage of 2 to 3 *rattis* morning and evening. Such a measure is advised for urinary disorders, emission in night and impotency. This is also a virilifying drug.

The Fruit of Peepul

The ripe fruit is sweet in taste, cold in effect, agreeable and good for heart (*hrdya*), digestive and regulative (*anulomak*). It is a mild purgative, a purifier of blood and a virilifying drug. It is useful in curing aggravation of *pitta*, and is effective in

assuaging vomiting, tastelessness in food, dessication of the tissues and burning sensations. It is employed in the affliction of plethora, convulsions and stomach pain and also calms down *vata pitta*.

Fruits are dried in shade and powdered. The powder is given to the patient of plethora to lick up as an electuary along with honey. This is also useful for patients of difficulty in breathing. Such a procedure is believed in addition to render the voice sweet and melodious.

For cooling down the sensation of burning at the stomach, take three *mashas* of the seeds within the fruit, grind them with water, filter and then mix unrefined sugar or sugar candy. Give this as a drink. This is seen to be beneficial in feeble or weak digestion as well as in constipation. Habituating oneself with the drinking of six *mashas* of shade dried and powdered fruit in milk or water daily is a good, effective and simple remedy for feeble digestive capacity. This is beneficial in severe constipation also.

The Latex or Milk of Peepul

This is usefully employed in assuaging pain, oedema; haemorrhage and cracks of the feet. If a little incision is done on the trunk or the tender leaves or the twigs are broken, this whitish, sticky milk oozes out. This has many medicinal applications. A few of them are given below.

Painful swellings, ruptured blood vessels, lesions and specially the chilblain (*bivayl*, where joints of the fingers and the toes particularly bleed out persistently and during rainy seasons)- these afflictions respond well to an application of this milk over the places concerned.

Redness of the eye, swellings and pains in the eye as well as many minor diseases of the eye get cured by an application of the latex through a collyrium needle.

In cases of urinary disorders as well as leucorrhoea (or the whites) in women, seven to twelve drops of latex are to be mixed with *vamsha lochan* (or bamboo manna - a treacle like secretion that gets collected over the surface of the bamboo tree). This is to be taken in, followed by a cup of comfortably hot milk. For a patient of leucorrhoea, ten drops of the latex are to be placed in the *batthas* (the dry spongy or porous sweat meat) and eaten in the morning followed by half a *ser* of cow's milk.

For pains at the rectum or shooting pains at the kidney, ten drops of the milk are to be mixed with a ball of one *tola* of crushed leaves. This is then to be placed in a *chilam* (hubble bubble) and smoked like tobacco. The relief one secures is quick.

The Lac of Peepul

Quite usually a type of secretion or a gum like substance gets collected on the surface of old

peepul trees, called as lac when it gets dried. This also has many medicinal properties. It is actually not a gum which is strictly a degenerative product of vegetable matter. Instead, this is a red coloured product that gets secreted by the infection of an insect called lac insect (*Coccus lacca* or *Tachardia Lacca*) which affect many trees besides peepul such as banyan, *dak*, (*Butea forndosa*), *ber* (*Zizyphus*) and the like. This is collected by the traders during the months of *Vatshakha* and *Ashwin*. Among all the lacs of medicinal efficacy, the peepul lac is considered the best. Sushruta gives it the first place among his list of the lacs.

Lac is essentially a product of the trees of the jungle. There is a huge manufacturing centre for lac production in Ranchi of the Bihar State. The commercial use of lac is more in pigment industry and the manufacture of varnishes, rather than as a pharmaceutical in the medical field. Lac happens to be one of the export materials, as it is not much available abroad. *Alakta* or *mahavard* which is a red dye with which ladies paint their feet, shellac (*chapada*) and rose pigment are prepared from lac.

Medicinally, lac is light for digestion, astringent in taste and bitter in post-assimilatory effect (*vipaka*). It is cold in virility, strengthening, and a purifier of the blood. It is viscous, pigment depositing (*ranyaka*) and colourative (*varna prada*) and alleviative of *pitta* and *kapha* aggravations. This is employed in dysentery (accompanied with blood), typhoid, hiccup, cough and consumption.

Other diseases where also this finds an useful application, are: diseases of the nose, erysepeals, skin diseases and leprosy, haemorrhage and oedematous swellings.

To check haemoptosis or spitting blood from the lungs, one to two *mashas* of very well cleaned peepul lac is given to be eaten along with goat's milk. Or, honey is mixed with lac water and given; the vomiting will stop quickly. The water of lac is prepared as follows. Mix into lac, one tenth of its part, of *lodhra*, soda bicarb or *sajjikhar* in one tenth of the *lodhra* component and a small quantity of *ber* leaves. Cook them in 16 times quantity of water till the latter is reduced to one fourth. This gives a very excellently coloured lac water or lac juice. Another procedure is: to tie lac powder in a piece of cloth and cook it in 6 times of water within a *dola yantra*. Filter it 21 times. Yet another procedure is: to boil lac powder in eight times of water till the latter is reduced to one fourth. The *dola yantra* procedure is considered to be the best.

In cases where such a spitting is an accompaniment of consumption, one *masha* of lac powder is given with ghee or honey three times a day. The spitting of the blood stops, the lesions will heal up and the phlegm comes out without any obstruction. In case there is a dysentery accompanied with blood (*raktatisara*) over and above this spitting of blood, add honey to milk and mix the powder of lac and drink. When the drug gets digested, a meal of rice with milk is to be

taken. The flow or the appearance of blood will soon stop. Another procedure is: to cook lac in ghee, dry, powder it and mix this powder in milk and drink. This is good in consumptive bleeding as well as in menorrhagia. To prevent the typical bleeding at the nose by a patient of plethora, clean the lac well, powder it fine and take one *masha* of it mixed with 4 *rattis* ghee, fried *geru* (red ochre) and drink with milk. This is a particularly useful drug for such patients.

Fresh lac is to be taken in 6 *mashas*; an equal quantity of white cumin seeds are to be mixed with it and both are to be powdered fine. Mix one *tola* of *gulkand* (a sweet chutney of rose petals) and along with seeds of pomgranate this is to be drunk repeatedly at an interval of four hours. This measure will definitely stop the spitting of blood.

The lac of peepul is powdered and one *masha* of it is repeatedly licked up with honey. This will stop hiccup, repeated coughing and difficulties in breathing. In dry cough the powder of lac is taken in a dosage of 3 upto 8 *rattis* along with sugar and honey three times a day by licking. The violence of coughing will be pacified. Breathing becomes easy and comfortable. In cases of coughing accompanied with bleeding (*raktaja kasa*) or with lesion (*kshataja kas*), take the lac of peepul, *kakadsinghi*, *munakka*, *kathi*, *mulethi*, *shatavar* and *pippali*—one part each, 4 times the net quantity of unrefined sugar and 2 times the net

quantity of *vamsha lochana*. Powder all of them together and store.

Take three *mashas* of it with honey and sugar.

Just the powder of lac alone taken in a dosage of 4 *rattis* along with ghee, sugar and honey twice a day will mitigate the violence of coughing remarkably. Chronic indigestion, debility, feeble digestion and constipation—even these will respond well to this simple remedy and the patient regains his normal health quickly and becomes strong.

For whooping cough in children, giving the powder of peepul lac in a dosage of three *rattis* along with 3 *mashas* of butter for three times a day has been seen to be beneficial.

Besides the above rather simple preparations of peepul lac, quite a few elaborate medicative formulations (*yogas*) exist with this lac as the principal ingredient. A few such formulations are given below.

- (1) *Lakshadi taila*—an oil preparation of lac and the like—for children's diseases.

Four *sers* of *laksha rasa* (prepared as shown above), one *ser* of gingely oil, and 16 *sers* of the water of curds (or butter milk prepared by twice the quantity of water to the curds) are to be taken and mixed together. For making this into a paste (*kalka*), take 2 *tolas* each of *rasna*, red sandal, *kuth* (*cotus*), *nagar motha* (*Cyperus rotandus* L),

ashwagandh (*Withania somnifera* Dun), turmeric, *daru haldhi*, soya, *mulethi* the root of *murva*, *katheri* and the seeds of *nirgundi* and grind them all together with water and make it into a mass. This whole lump is to be dropped into the mixture of the curds, the oil and the lac kept ready as above and cooked on a low fire. When the oil alone seems to be remaining, remove from the fire, cool and store.

Massaging the child with this oil will remove fever and bestow a strength and good development.

In cases of convulsions, fits and tetanus in a child, giving one *ratti* of lac powder mixed with milk twice a day is seen to be beneficial.

(2) *Laghu lakshadi taila*: The lighter oil of lac and the like-for fever.

Four *tolas* each of lac, turmeric and *majeeth* are to be ground together with water into a paste. Take then 128 *tolas* of gingely oil, and six times this quantity of what is called *arnal*. This is a kind of *conjee* or gruel water prepared as follows: Raw or mature wheat grains are broken crudely and cooked in eight times the quantity of water. When the latter quantity is reduced into half, remove from the fire, cool and pour this into an earthen ware vessel and close the lid. Kept it for 3 to 4 days and when it comes fermenting up, utilise it after filtering. This itself is a stimulative and *kapha* destructive substance very useful in pains all over the body (*anga marda*), pains in the bones and

constipations. Cook all of these together on low fire. When oil alone seems to be remaining, filter and utilise.

Taking bath with this oil will remove fever and the burning as well as the cold associated with it.

(3) *Laksha guggul*- an useful preparation for joining fractured bones.

Take one part each of lac, *had samhari*, bark of *arjun* tree, *ashwagandha* and *nagbala* and then pure *guggul* equal to the net quantity of all of these, pound them together, grind and make into pills.

Dosage is from 4 *rattis* to 2 *mashas* to be taken in orally and also applied over the region concerned. The broken parts will join up, the pain will go and the organ regains its premorbid health and vigour. The whole body becomes strong.

(4) *Laksha rasadi ghrta*—a ghee of lac water or juice.

Take 2 sers each of the juice of lac (prepared as above), curds, and milk and 1-1/2 ser of butter and 3 *tolas* each of sandal, *mulethi*, *patol*, *amala* and unrefined sugar. Mix all of them together on low fire till ghee alone seems to be remaining. Filter and utilise.

This will remove all types of pains in the head, eg. shooting pains at the eye brows alone or at the temples on the head or similar pains associated

with consumption or that of shooting pain which becomes acute as the day advances.

(5) *Lakshadi udvartana*—for skin diseases.

Take lac, resin of pine, lobhan, *kuth*, turmeric, *daru haldi*, white mustards, *trikatu*, seeds of radish and *papad*.—all in equal quantity, powder and store.

This is to be applied with sour conjee water or thick juice of lemon, followed with a local rubbing in. The measure will remove ring worm (*dad*), eczema (*kitihb*) and blotches and freckles (*sidhma*).

If there is insomnia due to over worked brain, taking 1 to 1-1/2 *mashas* of lac powder in milk at night is seen to be effective. This is to be taken with buffaloe's milk to which a little sugar is added. Sound sleep will come about.

A very important use of peepul lac not referred to so far is as follows. Take equal quantities of this lac, root of *shweta koyal*, fruit and flower of *arjun*, *vaya vidanga*, resin and *guggul*, pound and powder them all together. There should also be a very little quantity of *bhilawa* here.

Place a pinch of this powder in burning coal and fumigate any desirable area with its abundant smoke. This will destroy all insects and vermin, snakes, rats, mosquitoes, bed bugs and the like. This is a very good disinfectant.

An interesting and a specialised application in Ayurveda is what is referred to as a progressive medication of peepul (*vardhaman pippala*). The process is as follows: on the first day take 3 small leaves of peepul and half a *pau* of milk along with an equal quantity of water. Boil the latter two on fire till the quantity of water evaporates out. Remove from fire, cool and give it for the patient to drink followed by an eating of these three leaves. Next day increase the number of the leaves to 6. Increasing the leaves every day in this way by three go up to 30 leaves after which you come back to 3 again in the reverse way. Then stop this course of medication.

Such a procedure is considered to be an excellent procedure for transformation of body constituents (*dhatu parivartana*) and elixirisation (*rasayana*). This is said to be very beneficial in paralysis, chronic cough, enlargement of spleen as well as chronic diseases of the stomach and the intestine.

Other Uses of the Peepul

The very familiar peepul tree has many uses besides being employed for medicinal purposes. A few of them are mentioned below.

In dyeing: If the leaves are macerated and cooked in water, a reddish light brown pigment can be obtained. After a little further processing, this pigment is used to dye coarse silken cloth (*tasar*), mulberry silk and woollen threads into a reddish

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fawn colour. Though pigmenting material occurs in a little quantity in the barks of peepul, the latter does form an important raw material where lighter shades are desirable or where the objective is just to slightly modify colours obtained by employing other pigmenting substances and not to impart the colour as such. In Bengal, this is used along with other materials to secure full dark colouration. Cotton textiles are turned into beautiful rose colour by using the roots of peepul along with alum. The Buddhist monks dye their cloth into ochre red by a pigment extracted from the peepul bark.

In tanning: Peepul leaves are employed in tanning leather, because of their high content of tannin. Bark of the tree has just two per cent of tannin and still can be used for tanning and more importantly to colour the leather. It seems that Arabs actually do use the bark for this purpose.

Fibres: The bark yields a coarse fibre. This was used in Burma to prepare a type of crude paper which was particularly utilised in making a special type of green umbrella. Ropes are also made out of these fibres.

Latex: The milk of peepul contains from 0.7 to 5.1 per cent of caoutchouc. This is used to prepare a material for bird snare. About 250 grams of milk is to be kept boiling, stirring it all the while for 5 minutes in 120 grams of linseed oil to secure this material.

If the sticky white milk is kept as such for some time, it will turn into a hard gumlike material. From this a substance is prepared which is utilised in filling the hollow of the bangles and other ornaments. It is also used as sealing lac, and in filling up the cracks and punctures of motor tyre.

Lac: Peepul tree is an officinal, recognised tree for lac production in the States of Madhya Pradesh, West Bengal and Assam. The goldsmiths of Ahmabadad utilise this peepul lac to secure a reddish colour for gold.

Timber: The brownish white wood of peepul is of ordinary hardness only and constitutes an inferior type of timber. This is utilised in preparing many minor implements and pieces of furniture, only if no other wood is available and also for making packing cases and match-stick boxes. But the wood is not at all durable. However very much like the wood of banyan, this wood also stands well on being soaked in water. As such it is commonly utilised in making wells.

Sacred Fuel: The principal use of the sticks of peepul down the ages in India, has been as a sacred fuel to tend the ritual fires. This has been so used from times immemorial to even now. Collecting them- known as *samidha* has been one of the chief ordained duties of a celibate student, *brahmachari*. Because these sticks formed an integral part of all ritualistic and sacrificial fires (*yagna*), the tree itself was called an *yagna vriksha* or *yagnika*.

As a result of such an association with sacred purpose, the wood is generally not utilised at all as in an ordinary fuel tree.

In Arts: There is a traditional art of painting the portraits of great men, gods and goddesses and beautiful scences on the broad, dried, flat and very closely net-veined leaves of the peepul tree. For this purpose, mature broad leaves are selected and kept soaked in water for about eight to ten days. By that time the whole soft greenish portion of the leaf in between the nerves will become decayed and will crumble down. The network of the veins alone remains and the leaves are taken out only when this completely white net is remaining. They are then dried under shade and utilised for painting. Perhaps because of the association with sacredness, the design of the medal for Bharata Ratna 'Indian higher award' is shaped after a peepul leaf.

Forage Material: Leaves of peepul constitute a good forage material for silk insects. For the white silk insects of Assam it is this that is fed. The twigs and the leaves are the choice feeding materials for the elephants, the tree itself is called a *gajashana*, the elephant food. This is well liked by all animals such as cattle, buffaloes, goats and camels. Peepul tree is actually utilised for this purpose abundantly. The milk yield of goats increases much when they are fed with peepul leaves.

It is important and interesting to note that the protein content of the leaves is two to three times

of what is seen in grass, the principal forage material. This is as good as what the rich leguminous plants yield as forage, for example the much praised alfalfa or the lucerne. Their roughage value as well as the amount of other important concentrates are both commendable. On all of these accounts, peepul leaves and twigs are well acclaimed forage materials.

As a Nutritious Feed: The fruits of peepul constitute a very useful feed for all cattle and grazing animals. For birds, squirrels monkeys and rats they form a very inviting bounty. A chemical analysis of the dried fruits reveals the following components: wetness or water content 9.9%, albuminoids 7.9, viscous material 5.3, carbohydrates 34.9, pigmenting substance 7.5, ash content 8.3, and phosphorous 0.69.

Tender twigs and leaves and also the fruits of peepul have been the food of man during the times of famine. Santhal people actually use the fruits regularly. Gonds utilise the tender leaves in preparing curries and during the times of Charaka these were being regularly eaten so. Their slightly astringent preparation has a cooling influence on the body. They are a recommended diet for a patient of constipation whose evacuation is accompanied with severe burning. An ayurvedic author Narahari Pandit considers peepul fruits as extremely wholesome to heart and cooling. Charaka considers the fruit as astringent, sour-sweet and heavy. During his times there was a

tradition of drinking a fermented preparation or *asava* of peepul fruits.

THE GENUS *FICUS* AND MODERN STUDIES

Both banyan and peepul belong to the Genus *Ficus* which is a very big genus of the Family Urticaceae and consists of nearly 800 species of plants distributed in the tropical regions of the world. Of these, there are twenty one species in India itself. Most of these species moreover are well represented in many regions of India and constitute the close relatives of the banyan and the peepul. They also have their own medicinal and other uses to man.

We briefly mention just a few of them.

1. The most famous of these relatives of banyan and peepul is what is called as ***Udumbara*** in Sanskrit or ***gular*** in Hindi. This is botanically *Ficus glomerata* Roxb distributed throughout India and Sri Lanka.

All parts of *gular* have been used for some purpose or the other. Unripe fruits are highly edible; from them are prepared curry, pickles, *kadi* and curds preparations. Its milk, decoction of the bark as well as its powders, the thickened juice (*kinam*) from the leaves, dried and powdered fruits are the medicinally employed drug materials.

Fruit is given with success in apthae of the mouth (white circular sores on the inside of the mouth on its mucous membrane) with sugar and honey. When boiled in milk and given they are a good remedy for visceral obstructions. The plant has many ways of being utilised in diabetes. Fruit and the sap extracted from the trunk of the tree are effective in diabetes. Powder of the seed mixed with honey is regarded as a specific in diabetes as it reduces sugar in urine, quenches the excessive thirst and controls the polyuria or profuse urination of the patient. An infusion of the bark is given in diabetes. Fresh juice of the ripe fruit constitutes an adjunct or a medium or vehicle for metallic medicines given in diabetes and many other urinary complaints. The sap of the root is also known to give relief in diabetes. The root is useful in hydrophobia—or the bite of a mad dog.

Its important constituents are tannin, wax and caoutchuc, a rubber like substance useful in chewing gum preparation and the ash containing silica and phosphoric acid.

2. ***Ficus hispida*** (roughly hairy) Linn is *kakodumbura*—the crow udumbara (i.e. and inferior relative of the above mentioned *udumbura*) of the Sanskrit authors. This is called *katgular* in Hindi.

This is a shrub or a small tree all parts of which are more or less hispid viz. roughly hairy. Its constituents are tannin, wax, a caoutchouc like substance and a glucocidal principle having the

properties of saponin. The plant occurs more or less throughout India and Sri Lanka.

The fruits are cooling, astringent and sour. Many uses of the plant are similar to what is seen in the banyan tree.

3. ***Ficus asperima*** Roxb is *kharapatra* (leaves are very rough) of Sanskrit or *kal umar* of Hindi. This is a shrub or a small tree with no aerial, hanging, roots. Young parts and particularly the leaves are scabrid viz very rough. The plant has a rather restricted distribution. It is mainly confined to Central India, West Coast and South India and Sri Lanka.

It contains a crystalline principle, soluble in alcohol, an alkaloid, an inorganic acid, white calcareous matter and ash upto 18%. Both the juice and the bark of the plant are used in glandular enlargement of liver and spleen. Such a use is well known in Maharashtra. Juice is applied to cracks and tissues of palms, hands and soles of feet. Bark is mildly acidic and is used as a tooth brush to remove the tartar or to cleanse the teeth.

4. ***Ficus gibbosa*** Bl also called *udumbara* in Sanskrit is however a small though at times a large tree, often epiphytic, growing on other trees purely for support enclosing their trunks in a perfect network of branches. They also occur creeping along the walls and on the sides of wells. The fruit is yellow when ripe.

The plant is well represented in many places - sub Himalayan tract, Assam, Burma, Bihar, Madhya Pradesh, Western India and Sri Lanka as well as China and Malaysia.

The decoction of the root is a powerful laxative. The root bark is good for stomach and is gently laxative.

5. ***Ficus benjamina*** Linn is *pakur* in Bengali and *pimpri* in Bombay. The modern pencil factory at Pimpri near Pune was presumably abundantly filled with this tree once. This is an evergreen tree with a dense canopy of foliage and pendulous branches. All parts of the plant are smooth and non hairy. Fruit is blood red when ripe.

The plant is found at the base of the Himalayas as well as in the Deccan Peninsula and Kerala.

In Malabar a decoction of its leaves is mixed with oil and applied to ulcers. Juice of the bark has a reputation in liver disease and is given in a dosage of one *tola* in milk. A ghee (*ghrita*) is prepared from this juice and is considered as powerfully effective in flatulent colic or severe twisting pain associated with gas collection in the stomach and the intestine. For this, take equal parts of the juice of its leaves, as well as that of *tulast* plant, mix them in water and boil till water evaporates completely. Do so for twenty one times, each time adding fresh quantities of the juice of both the plants. What you get finally as the

residium or the concentrate is used as the medicine. This is applied over the belly and a fomentation with hot brick is carried out over this.

6. ***Ficus retusa*** Linn. This is called *kashtalaka* in Sanskrit and *pinawal* in Hindi or *nandruk*, *pilala* in Bombay.

This is a moderate sized shady tree, all parts of which are smooth, non hairy; hanging roots are very few or sometimes absent. This is also widely distributed in India, Sri Lanka, China, Malaysia and Australia.

All parts are pungent, bitter and tonic. The bark of the root and the leaves boiled in oil form a good dressing for wounds and bruises. In rheumatic headache, leaves and bark are pounded and applied as a poultice. From the leaf juice of this plant also a ghee is prepared with the juice of *tulasi* as in *F. benjamina* above, for flatulent colic. In China the aerial roots are considered to be a sovereign remedy for toothache. They are mixed with salt, thoroughly dried up, powdered and applied to decayed or aching tooth.

7. ***Ficus rumphi*** Bb. This is called *pakar* or *wen pipal* in Hindi, *pilkhan* in Punjabi, *galaswattha* in Bengali. This is a moderate sized deciduous tree starting its life as an epiphyte like the peepul. It is well distributed all over India.

Santals use the fruit as a drug. In Konkan, the juice is used to kill worms and is given internally

with turmeric, pepper and ghee in pills of the size of a pea for the relief of asthma.

8. **Ficus lacor** Ham. This has many names in Sanskrit: *ashwatthi*, *charudarshini* (pretty looking), *kamandalu tari*, *kapitana*, *pimpari*, *plaksah vati*. It is *pakas*, or *pilkhan* in Hindi.

This is a large spreading deciduous and fast growing tree of the plains and the lower hills of India, Sri Lanka and Malaysia.

All parts are acid, pungent and cooling. They are useful in hallucinations and loss of consciousness. Its bark along with the other species of *Ficus* and *Neem* constitute an important drug called *panchavalkala* (Fine barks) always used in combination.

9. **F.heterophylla** Linn. This is *trayamani* (protective) of Sanskrit, *balalata*, *bala*, *bahula* or *bhuidumur* of Bengali.

This is a shrub sometimes creeping along the ground or over rocks. The plant is distributed throughout the hotter parts of India, Sri Lanka and Malaysia.

The juice of the root is given internally in colicky pains and the juice of the leaves is mixed with milk and given in dysentery. The root bark is very bitter and powdered and mixed with coriander seed. This is regarded as a good remedy in cough, asthma and similar affections of the chest.

10. **F. cunia** Ham. This is also called *khara patra* in Sanskrit and known as *khunia*, *ghui*, *khurhur* or *porho* in Hindi or *dumber*, *jagaya dumur* in Bengali.

This is a small or medium sized tree of irregular habit, found mostly in northern India and Burma.

The fruits are advised in apthae. A bath made from the fruit and bark is regarded as a cure for leprosy. The juice from the roots is given in bladder complaints and boiled in milk and given in visceral obstructions.

11. **F. ribes** Reinw. This is *chota jangli anjur* (the small forest fig) in Hindi, distributed mainly in Burma and Malay Archipelago.

It is an ever green tree, with medicinal properties similar to what is seen in *F. hispida*.

12. **F. palmata**. Forsh. This is called *anjir* (Fig) in Afganistan and also Hindi which gives a few additional names: *gular*, *khagara*, *khumri*.

It is a deciduous shrub or small tree of Baluchistan, Punjab, Mt. Abu, and North West Himalayas upto Nepal.

The fruits are demulcent (cooling and refreshing) much like the famous fig fruit (*anjir*) and laxative. They are mostly used as a diet in cases of constipation and in diseases of the lungs and the bladder. They also form a healing material for poultice.

13. **F. carica** Linn. This is the famous fig of commerce (*anjir*) and resembles *F. palmata* very closely and is perhaps not specifically distinct from it. It is a shrub or a small deciduous tree where branches and the underside of leaf are softly hairy. The tree is dioecious i.e. either male or female and not both. Though leaves in both sexes are the same, the difference in the shape of the receptacles and flower is so great that once they were regarded as distinct genera or species, the male tree being called as *caprificus*.

This is a plant of Baluchistan and Afghanistan and West Asia and East Mediterranean. But it is now well cultivated in North West India and Deccan.

The fruit is sweet, cooling and highly refreshing. It is used in the diseases of blood, and the bleeding of nose. Yunani physicians consider the root as tonic and useful in ring worm and leucoderma.

Both fresh and dried fruits are used in constipation. Roasted figs form a household remedy in Europe for gumbolls, boils and carbuncles. A poultice of dried figs in milk is said to remove unpleasant odours from ulcers and cancerous tumours. The pulp of the fruit is mucilaginous and has been an esteemed remedy for coughs. Fresh green fruits secrete a milky acid juice which will destroy warts.

The constituents of the fig fruit are: proteose, amino acid, tyroxin, an enzyme called cravin,

lipase and protease. The fleshy fruit is rich in grape sugar (62%), gum, fats and organic salts. Dried figs contain sugar, pectin, gum, albumen and salts. Milky juice is a peptonising ferment. All the enzymes help in digestion.

Fig fruits are very wholesome, easy to digest and medicinally effective in that they remove gravels in kidney or bladder. They are also given to cure piles and gout. Milky juice of the plant cures ulcers in the mouth. Figs are very effective in curing liver complaints of children. Fresh ripe figs, 2 to 4 of them mixed with sugar candy powder and exposed to snow during the night and eaten early in the morning remove the heat of the body in a very effective manner. But this is to be continued for 15 days to secure the full benefit. Fresh figs form a nice tonic to weak people suffering from cracking lips, tongue and mouth.

14. **F. arnottiana** Miq. Sanskrit calls this also as *palsksha* while in Hindi, it is *paras pippal* (forest peepul of Kodie ashwattha in Kannada).

This is a smooth, non hairy shrub or a tree of Rajasthan, Bihar, Western India and Sri Lanka. The leaves and bark are used in skin diseases.

15. **F. dalhousia**. Miq. This is called *somavalka* (white barked) in Sanskrit, and *kallal* in Tamil.

This is a graceful shady tree of 9-12 metres height named after Lord Dalhousie, the then viceroy. The plant is confined to Nilgiris of Tamil

Nadu. Young branches are softly hairy to start with but later become smooth and hairless.

The leaves are used in liver complaints and skin diseases. The fruit is given in heart diseases.

16. **F. talboti** G. king. Tamil calls it *kalitti* or *itti*.

This is a large tree, smooth and non hairy. Milky juice is abundant and that of young branches is yellowish. The bark is grey and smooth.

The plant grows in Western India and particularly well in the forests of North Canara.

A decoction of the bark is used in diarrhoea, ulcers, venereal diseases and leprosy.

17. **F. tsiela**. Roxb. Sanskrit calls this also as *plaksha* and *kaninika*. In Bombay this is *pimpri*, Kannada, *dodda basiri* and *pakri*, *pilas*; *jari* in Hindi.

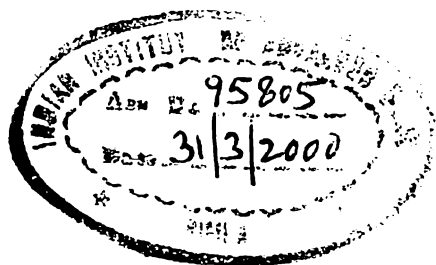
This is a large spreading tree with no aerial hanging roots. It is non-hairy and smooth. It is found mainly in Madhya Pradesh, Western Peninsula and Sri Lanka.

The bark is used in colic pain.

Some modern work exists in connection with two aspects of the medicinal properties of the genus *Ficus* viz effects on diabetes and effects on blood pressure. A glycoside from the root bark of *F. bengalensis* does lower the blood sugar level in

diabetes induced rabbits. Clinical studies on 12 normal volunteers and 6 diabetic patients showed that the crude aqueous extract of the bark showed no effect in the normal but did show a mild lowering down of blood sugar level in the diabetic patients. From ethanol extract of the bark, three flavonoids were isolated and found to be effective in fasting rabbits. An ethanol extract from the leaves of *F. racemosa* was seen to exert hypotensive (lowering the blood pressure) and vasodilator effect (dilating the lumen of the blood vessels) in anaesthetised dogs and produced a depressant action in the rate and force of contraction of the rabbit's isolated heart. A decrease in the force of contraction of the ventricles of the heart was also noticed in the heart of frogs.

The alcoholic extract of the stem bark of *F. racemosa* possessed antiprotozoal activity against *Entamoeba histolytica* (a disease causing parasite). The stem bark of *F. religiosa* also showed this activity as well as against roundworms and an antiviral activity against Ranikhet disease virus.



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