

## AN ETHNOBOTANICAL SURVEY OF JAVVADHU HILLS, TAMIL NADU

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**ABSTRACT :** *This paper deals with the ethnobotanical observations on the tribals of javvadha Hills of Tamil Nadu. The medicinal uses of about 50 species are recorded.*

### INTRODUCTION

Reports on the ethnobotanical studies on the tribals of Javvadhu Hills are very rare. The only paper which deals with the flora of the area is that of Lakshmanana and Viswanathan (1991). The present study was therefore, undertaken to fill the lacuna.

#### Topography

Javvadhu Hills are situated in Uthankarai taluk of Dharmapuri district. The population of this area is approximately 7000, mostly inhabiting fourteen villages, each one having around 500 inhabitants.

The elevation ranges from 110-1200 feet above sea level. Most of the area is plain without large rivers except a few small streams of seasonal nature. The climate consists of three distinct seasons in a year viz., rainy season (July-November), winter (December-February) and summer season (March-June). The average annual rainfall is about 58 cm through both the southwest and northeast monsoons. The mean annual temperature touches 40°C, the maximum being in April, May and the minimum in December-January.

### ETHNOLOGY

The important communities of this area are some scheduled castes, yadavas, gounders and mudaliars. Among them yadavas and some scheduled castes are experienced in the medicinal uses of plants of this region. Plants are the only source of medicine to the people who are below the poverty line, irrespective of caste. Most of the people are engaged in agriculture either as labourers or as owners of land. The major language of this area is Tamil, but Telugu is also spoken by a few.

Medicinal plants are used often visit the place to collect medicinal plants. Mostly people from 14 adjacent villages tend to use the inexpensive plant drugs. Conservation of the medicinal plants of the area and long term basis will be much appreciated.

### METHOD OF STUDY

The material for the present investigation was collected from the villages of javvadhu Hills.

Several visits were made to cover almost all the areas. The interesting uses of medicinal plants described in the present paper were gathered from these tribals and the herbal doctor of the region, local vaidias and amateur practioners. Voucher specimens of the important plants were deposited in the herbarium. As far as possible, attempts were made to collect information on various diseases and the methods of their treatment. The plants were identified with the help of various floras. They were classified according the Bentham and hooker.

## OBSERVATIONS

### 1) *Clematis gouriana* Roxb ex DC.

Bruised leaves and stems are vesicant and poisonous. They are used as lice killer and as hair tonic. One week use is essential to eradicate lice and their eggs.

### 2) *Naravelia zeylanica* (L) DC

The stems are used as tooth-sticks to cure toothache. Roots, when crushed emit an aroma, which is believed to cure winter headache. Many children who suffer from winter cold get good relief.

### 3) *Annona cherimola* Mill

Its large fruits are delicious and of an greeable flavour. They are used in the treatment of common colds.

### 4) *Annona squamosa* Linn

The unripe fruits, seed, leaf and root are used for destroying insects and lice. The seeds are abortifacient in large doses. Root is a drastic purgative. The crushed leaves are applied to the nostrils in hysteria. Fruit is a source of vitamin 'C' and an anti-ulcer medicine. Leaves are poisonous insects

because of the hydrocyanic acid content the juice of the leaves is used in skin diseases.

### 5) *Cissampelos pareira* L.

Root is bitter and used in stomachache, dyspepsia diarrhea, dropsy, cough and urinary troubles, like cystitis and in snake-bite. The powdered root is dusted over ulcers to ward off flies. Leaf paste is used externally for itches.

### 6) *Cocculus hirsutus* (L) DC [*Cocculus villosus* (Lam) DC]

Root is used with other ingredients for bilious dyspepsia, rheumatism and for stomachache in children. Juice of leaves mixed with water forms jelly which is taken as a colling medicine in gonorrhoea and is used externally for eczema and impetigo.

### 7) *Caparis sepiaria* L.

The powdered bark mixed with garlic, pepper and palm jaggery is given as an effective remedy for rheumatic pains and herpes virus infections. Leaf juice (about 20ml) is useful in the treatment of gonorrhoea.

### 8) *Creataeva magna* (Lour) DC

Maceration of leaves is drunk twice a day in the treatment of bleeding piles, Leaf paste is applied externally as an ointment in piles.

### 9) *Cochlospermum religiosum* (L) Alston

The gum is sweet, cooling sedative and useful in cough.

### 10) *Dianthus caryophyllus* L

The flowers are considered to be cardiogenic, diaphoretic and alexiteric. The whole plant is employed as vermifuge.

11) *Polygala chinensis* Linn

The leaves are used in spermatorrhoea. Decoction of the roots is given as an expectorant and cough. It is also used in chronic chest disease, diarrhea and in inflammation of urinary bladder.

12) *Portulaca oleracea* Linn

It is useful in scurvy and in diseases of liver, spleen, kidney and bladder. It is also prescribed in the treatment of cardiovascular diseases, dysuria haematuria, gonorrhoea, dysentery, sore nipples and ulcers of the mouth. The juice of the plant is used in earache and toothache. A paste of the leaves is applied to burns, scalds, swellings and erysipelas. The leaves and tops are employed in anti-haemorrhagic poultices. The boiled leaves mixed with cow-milk are used in blood-vomiting.

13) *Shorea robusta* Gaertn.f.

The resin is used for fumigating infected rooms. A paste of its mixed with brandy and egg albumin is applied to relieve pain in lumbago and chronic rheumatism.

14) *Abutilon indicum* (L) Sweet.

The leaves are rich in mucilage and are used as demulcent tonic. A lotion of leave is used in rheumatism. An infusion of the roots is taken internally as a cooling medicine. The seeds are rich in mucilage. The bark is astringent and diuretic and is used in gonorrhoea and strangury.

15) *Gossypium arboreum* L.

The root is used in fever and the seed is used in gonorrhoea and chronic cystitis.

16) *Gossypium hirsutum* L.

Juice of the leaves is used in scorpion sting and snake –bite. Decoction of the root bark is used as abortifacient and oxytocic and is also given in amenorrhoea, dysmenorrhoea, uterine haemorrhage and to cause abortion.

17) *Hibiscus rosa-sinensis* Linn

The flowers are made into paste and applied to swellings and boils. A decoction of the flowers is given in catarrh. They are fried in ghee and given in menorrhagia.

18) *Sida cordifolia* Linn

The juice of the plant is mixed with the juice of *Borassus flabellifer* for treating elephantiasis. The mucilaginous leaves are used as a demulcent and their infusion is given in fever as a refrigerant. A decoction of the leaves is said to possess emollient and diuretic properties.

19) *Waltheria indica* Linn

The plant is credited with febrifugal, purgative and emollient properties. It is used as resinous powder for drying and healing of wounds. The powder is also used against cough. A decoction of the aerial parts is used in skin-eruptions and for cleaning wounds.

20) *Corchorus trilobularis* L.

Seeds are used in fever and obstruction of the abdominal viscera. The mucilage is demulcent. The plant ashes are mixed with honey for administration in obstruction of the abdominal viscera. An infusion of the

leaves forms a useful medicine for fevers.

21) *Erythroxylum monogynum* Roxb.

Leaves are considered as a refrigerant, bitter tonic and nutrient and are largely eaten during the times of famine. An infusion of the wood and bark is considered stomachic, diaphoretic, diuretic and hallucinogenic.

22) *Boswellia serrata* Roxb ex coleb.

The fresh leaf juice and resin are used in ulcers of mouth and throat; the gum ointment for sores. Decoction of the stem bark is used in the treatment of skin diseases.

23) *Commiphora caudate* Engl.

It is a very important soft-wooded tree of tribal medicine. The green bark is made into paste and then boiled with castor or ginegelly oil and the semi-hot juice is smeared over the body for the treatment body pains. The resin of the stem is applied to the fissures of feet to relive pain and swelling.

24) *Melia azedarach* L.

The flowers and leaves are applied as poultice to relieve nervous headaches. The juice of the leaves administered internally is said to be anthelmintic, antilithic diuretic and emmenagogue and is thought to resolve cold swellings and expel the humours which give rise to them.

25) *Cissus quadrangularis* L.

the chutney made out of the twigs of the plant, cumin seed and pepper is eaten in the case of cough and dyspepsia. The juice of the stem is poured into the ear in earache and into the nose in epistaxis. It is repled in

the treatment of scurvy and in irregular menstruation.

26) *Lepisanthes erecta* (Thw) Lennh.

The leaves are cooked in ginegelly oil, filtered and applied to hair to arrest dandruff. Good hair growth is reported with frequent use. The fruit pulp is used to dissolve kidney stones and to cure urogenital infections. The seed is cooked in coconut oil and applied. To burnt parts of the skin to gain normal colour of the skin.

27) *Anacardium occidentale* L.

From the juice of the torus, a kind of wine is made and is used as diuretic and sudorific and also applied externally in rheumatism. The bark is rich in tannic acid and decoction makes it a good astringent wash. Tar from the bark is applied in leprosy, corns as counter-irritant in ulcers, rubefacient and vesicant. Root is used as purgative; kernel is demulcent and emollient. Fruit is antidiarrhoeal. Seed oil is useful in warts and eczema.

28) *Pongamia pinnata* (L) Pierre.

The juice of the leaves is prescribed in flatulence, dyspepsia, diarrhea and cough, it is also considered a remedy for leprosy and gonorrhoea. A hot infusion of the leaves is used as a medicated bath for relieving rheumatic pains and for cleaning foul ulcers and sores. The juice of the roots is used in the treatment of gonorrhoea. A paste of the roots is also used for local application in scrofulous enlargements. The stem bark is given internally in bleeding piles and in beri-beri. The dried flowers are used in decoction to quench thirst in diabetes.

29) *Trigonella foenum- graecum* L.

The seed is carminative, tonic and anhydrodisiac. They are used in dyspepsia with loss of appetite. A poultice of the leaves is applied externally for swellings and burns and to prevent hair fall.

30) *Cassia auriculata* L.

The powder of the dry seed is an external remedy in certain cases of ophthalmia. The flowers and the bark are crushed with cubebs, poppy seed, black peeper and white mustard seeds and then fermented with the flower buds of *Musa paradisiacal* overnight and then mixed with the bark decoction of *Ficus glomerata* and powder of cloves and nutmeg finally, the whole of the extract is mixed with the powder of dried roots of *Hemidesmus indicus* R. Br. And given to check menorrhagia.

31) *Albizia lebbek* (L) Wild.

The decoction of the leaves is used against snake-bites and scorpion sting. Bark and seeds are astringent and is given to heal piles and diarrhea and as a restorative tonic.

32) *Entada pursaetha* DC. *Mimosa entada* L.

The seeds are considered tonic, emetic, antiperiodic and anthelmintic. Half-ripe seeds ground into paste with water is used for hair wash. Seeds are used as fish poison. A paste prepared from the seeds is applied locally for inflammatory glandular swellings. The juice of the wood and bark is used externally for ulcers.

33) *Terminalia arjuna* (Roxb ex DC. Wight & Arn.)

The bark is acrid and credited with styptic, tonic, febrifugal and anti-dysenteric properties; the powdered bark is taken with

milk in fractures and contusions with excessive enchymosis. A decoction of the bark is used as a wash in ulcers. The fruit is tonic and deobstruent. Juice of the fresh leaves is used in earache, twigs are used to cure blisters and ulcers of the mouth.

34) *Terminalia bellirica* (Gaertn) Roxb.

The plant is astrigent, tonic, digestive, attenuant and aperient as an application to the eyes. The pulp of the fruit is considered to be astringent and laxative and is prescribed with salt and long pepper in affections of the throat and chest.

35) *Eucalyptus globules* Labill.

Oil from leaves used as anti-septic in infections of the upper respiratory tract and certain skin diseases., Mixed with equal amount of olive oil it is used as rubefacient, for rheumatism, also used in ointments for burns, it is internally used as a stimulating expectorant in chronic bronchitis. Decoction of leaves is used as a repellent of insects and vermin.

36) *Glinus oppositifolius* (L) A.DC

The plant is considered aperient antiseptic and efficacious in suppressed lochia; I is smeared with castor oil and applied warm for earache. The plant juice is applied to itch and other skin diseases.

37) *Centella asiatica* (L) Urban

An infusion of the plant is used in the treatment of leprosy. They usual dose for oral administration is 5-10 grains of the plant powder, thrice daily. In large doses, the drug is a stupefying narcotic, producing giddiness and sometimes coma. Leaves are taken as tonic for improving member. They

are useful both internally and externally in syphilitic skin diseases.

38) *Gardenia gummifera* L.f

The resin is antispasmodic, expectorant, carminative, diaphoretic and anthelmintic. The resin is given to children in nervous disorders and diarrhea due to dentition and rubbed on gums to allay irritation. Resin is also used to clean foul ulcers. The resin is extensively employed in veterinary medicine to keep away flies from sores, for destroying maggots in wounds and for washing sheep.

39) *Ageratum conyzoides*

The leaves of the plant are used for cuts and sores and as an external application to ague.

40) *Ecilpta prostrate* (L.) L

The herb is used as tonic and deobstruent in hepatic and spleen enlargements and in skin diseases. The plant juice is administered in combination with aromatics in jaundice. The expressed leaf juice along with honey is a popular remedy for catarrh in infants. A preparation obtained from the juice of the leaves boiled with sesamum or coconut oil is used for anointing the head or render the hair black and luxuriant. The fresh plant is considered anodyne and absorbent. It is rubbed on the gums in toothache and applied with a little oil for relieving headache.

The root is emetic and purgative. It is applied externally as antiseptic to ulcers and wounds in cattle.

41) *Holarrhena antidysenterica*

The stem and root bark are medicinal and have long been used in the treatment of dysentery. The bark has astringent, antisentetic, anthelmintic, stomachic,

febrifugal and tonic properties. It is used in the treatment of amoebic dysentery and diarrhea, usually administered as extract of decoction.

A hot decoction of the drug used as a gargle in toothache. A powder prepared from the bark is rubbed on the body in dropsy. The seeds are used in pessaries for promoting conceptions for toning up vaginal tissues after delivery.

Leaves are used in chronic bronchitis and for boils and ulcers. A powder prepared from the roots and leaves is administered to stop haemorrhages after child-birth and bleeding from the nose.

42) *Ichnocarpus frutescens* (L.) R.Br.

The root powder is administered with milk for diabetes, stone in the bladder and as blood purifier, a decoction of the shoots is used in fevers. Leaves are boiled in the oil and applied in head-aches and fevers.

43) *Asclepias curassavica* L.

The juice of leaves is said to be anthelmintic and sudorific. The root is emetic, purgative and a remedy for piles and gonorrhoea.

44) *Calotropis gigantea* (L.) R.Br.

The latex is a strong irritant to the skin or mucous membrane. The latex is used in indigenous medicine in combination with *euphorbia nerifolia* as a drastic purgative. A tincture of the leaves is used in the treatment of intermittent fevers.

Powdered flowers, in small doses are useful in the treatment of coughs, asthma are indigestion, powdered root bark gives relief in dysentery.

The root bark is said to be similar to ipeacuanunba in its action. The flower buds and turmeric powders are mashed into paste with butter –milk and applied externally for healing wounds.

45) *Gymnema sylvestre* (Retz.) R

The leaves are sometimes used as a remedy for diabetes. The leaf powder is bitter and stimulates the heart and the circulatory system. It increases the secretion of urine and activates the uterus.

46) *Bacopa monnieri* (L) Pennell.

The entire plant is used in indigenous medicine as a nervine tonic and as a cure for epilepsy and insanity.

47) *Pedaliium mures* L.

A viscid mucilage separates out by simple agitation of young twigs leaves, fruits, leaves, fruits or seeds in water or milk. The mucilaginous infusion so formed is credited with demulcent, diuretic and tonic properties and used in the diseases of the urino-genital system, such as gonorrhoea, dysuria.

A decoction of the leaves is given to cases of gonorrhoea. The leaves are applied to ulcers and a decoction of the roots is said to be anti-bilious.

48) *Sesamum indicum* L.

Seeds are emollient tonic diuretic and lactagogue. They are useful in piles. In form of decoction they are as emenagogue and as emenagogue and as a poultice applied to ulcers.

Seeds and oil are used as demulcent in dysentery and urinary complaints in combination with other medicines.

Sesamum in decoction, is said to be emmenagogue and the same preparation sweetened with sugar is prescribed in cough a compound decoction with linseed is used and aphrodisiac.

A lotion made from the leaves or roots is used as a hair wash and is recommended to promote the growth of black and lustrous hair.

49) *Mentha arvensis* L

A soothing tea brewed from the leaves and later converted into an alcoholic beverage is used as an antidote for poison.

A sweetened infusion of the herb is given as a remedy for infantile troubles, vomiting in pregnancy and bronchitis

A decoction of leaves is given in fever and used as a lotion in aphthae.

50) *Ocimum basilicum* L.

The plant is considered as stomachic, anthelmintic antipyretic, diaphoretic, expectorant carminative stimulant and pectoral. An infusion of the plant is given for cephalalgia and gouty joints and used as a gargle for foul breath.

The juice of the leaves has a slightly narcotic effect and always irritation in the throat. Also used as a nasal douche and for earache.

Seeds possess demulcent stimulant diuretic, diaphoretic and colling properties, they are given internally in cases of habitual constipation and piles, they are also used in poultices for sores and sinusitis. The juice of leaves is applied in drops in the case of ear aches.

51) *Achyranthes aspera* L.

The flowering spikes or seeds ground into a paste and used as an external application for poisonous insect bite.

A decoction of the entire plant is reputed to possess diuretic properties and occasionally, it has proved useful in renal dropsies. The plant has the reputation of being a powerful talisman and is popularly believed to act as a safeguard against scorpions and snakes.

The flower-stalk is a purgative, pungent, digestive a remedy for phlegmatic. Piles, itchy abdominal enlargements and enlarged cervical glands, the Juice of the twig is applied to relieve tooth-ache. The ashes with

honey are given to relieve cough the root powder dose of one total is given at bed-time for night blindness. The juice of leaves is mixed with the paste of dried ginger and applied to eye injuries of cattle.

## DISCUSSION

The unequivocal relationship between man and plants is not an uncommon phenomenon. Nevertheless plants have been considerably hosting man and other animal world since time immemorial in several ways. The present study reveals that the uses of the plants in medicine are very variable depending upon the type of illnesses and the availability of the plants. People under the poverty line well being. The medicinal plants of Javvadhu. The medicinal plants of javvadhu hills are to be studied systematically so that their therapeutic virtues can be fully utilized.

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