

AN ACCOUNT OF THE ETHNOBOTANY OF SAURASHTRA IN GUJARAT STATE (INDIA)

G. L. SHAH, A. R. MENON AND G. V. GOPAL

Department of Biosciences, Sardar Patel University
Vallabh Vidyanagar 388 120 Gujarat

ABSTRACT

In the present paper, the medicinal and/or other uses of 133 species of plants are given alongwith their local names.

INTRODUCTION

As an adjunct to the floristics (Santapau, 1962; Santapau and Janardhanan, 1967; Shah 1978; Shah and Menon, 1980) and ecology (Shah and Menon *in press*), the information collected from the local people and *maldharis* in Saurashtra about the medicinal and/or other uses of plants are pen down in this paper to serve in time for such an information to be properly utilized in the larger interest of the larger groups of people.

ENUMERATION

ANNONACEAE

Annona reticulata L. (Ramphal).

Bark is a powerful astringent, used as antidiysenteric and vermifuge. The seed kernel is highly poisonous. The fruit pulp is sweet and edible but the paste is used to kill lice on cattle.

Annona squamosa L. (Sitaphal).

The pulp of ripe fruits of cultivated plants is sweet and edible. The fruits are sold in markets in October-November. The ripe fruit bruised and mixed with salt is applied on chronic tumors to hasten suppuration. Leaves are made into paste without adding water and are applied to ulcers. Seeds are used for abortion. The

vapour of boiled leaves is inhaled in cases of hysteria and fainting.

MENISPERMACEAE

Cissampelos pariera L. (Venivel, Pahadvel)

The leaf paste is applied to sores and wounds, and the root paste in snake and scorpion bites. The root decoction is administered internally to control excessive urine discharge. *Cocculus hirsutus* (L.) Diels (Vevdi, Vevti).

The tender shoots and leaves are given to buffaloes as a fodder as it is believed to increase milk secretion. Leaves and roots allay irritation, fever and rheumatism. The leaf juice coagulates in water and forms a mucilaginous gel which is applied externally as cooling and soothing in eczema.

Tinospora cordifolia (Willd.) Miers. (Gulvel, Gadu, Gudajvel).

The whole plant decoction *satva* is well-known for its tonic properties.

PAPAVERACEAE

Argemone mexicana L. (Darudji).

The yellow milky sap is used to treat scabies. The leaf juice alongwith cow milk is said to be used to treat leprosy.

FUMARIACEAE

Fumaria indica (Hassk.) Pugsley (Pittapapdo).

The stem or leaf infusion is given to treat mild cases of diarrhoea.

CAPPARACEAE

Capparis decidua (Forsk.) Edgew. (Kera).

The young flower buds and fruits are pickled. The dried branches are used as a fence and fire wood. The leaf juice improves appetite and helps in cardiac troubles.

Capparis sepiaria L. (Kanthar, Kantharo).

The dried branches make a good fence and fire wood.

Cleome gynandra L. (Ghandhatu).

The whole plant is awfully foetid but the seeds in very small quantities are used in curries as a flavouring agent.

FLACOURTIACEAE

Flacourtia indica (Burm. f.) Merr. (Gargugal, Lodri).

The ripe fruits are edible. A leaf and root infusion is an antidote snake bite. The bark boiled in sesamum oil is a useful liniment in gout and rheumatism.

PORTULACACEAE

Portulaca oleracea L. (motiluni, kutbo).

The succulents leaves are consumed raw or cooked as vegetables. Medicinally they are used in bilious condition and low fever, to allay thirst and headache.

ELATINACEAE

Bergia suffruticosa (Del.) Fenzl. (Kharsan, Ropatri, Lavari).

The stems are used as tooth brushes.

MALVACEAE

Hibiscus rosa-sinensis L. (Jasund).

A decorative garden plant. The flowers are fried in cow ghee and given to ladies in cases of menorrhagia and the root paste in cough.

Hibiscus vitifolius L. (Vankapas, Vanbhindo).

The stem yields a good fiber, used by local people to tie bundles of logs.

Kydia calycina Roxb. (Waring, Motthirvani).

The root is employed as a febrifuge and in rheumatism. The leaves are chewed to overcome deficiency of saliva.

Pavonia zeylanica Cav.

The leaves are chewed as they are refreshingly tasty.

Sida ovata Forsk.

The dried plants are bundled together as a broom-stick.

Thespesia populnea (L.) Soland. (Paras, Piplo, Pardesh Bhindi).

The tree is planted as a shade tree along road sides. The flower juice is used as a rash cure.

STERCULIACEAE

Helleteres isora L. (Maradsing, Ati, Atai).

The seeds are said to be mild purgative and given to children in flatulence and griping stomach pains. The bark yields a good fibre for tying the logs.

Melochia corchorifolia L. (Chunchu, Khapat).

The leaves are edible as vegetables. The stem yields a fiber. The plant decoction is said to be used as a remedy against snake bites.

Sterculia urens Roxb. (Kadai, Kadayo).

The paste of the gum is applied in case of pain in joints and given to pregnant ladies as one of the ingredients in a tonic medicine.

Sterculia villosa Roxb. (Sardol, udal).

A valuable fibre is obtained from the stem cortex.

Waltheria indica L.

The plant decoction is used in cough.

TILIACEAE

Grewia subenequalis DC. (Phalsa).

The fruits are tastefully acidic and sold in markets in the month of April-May.

ZYGOPHYLLACEAE

Peganum harmala L. (Espuva).

Locally the bark is used in the treatment of malaria and other types of fevers, as a substitute for cinchona bark. The seeds are burnt and fumigated on the body of the person suffering from measles.

Tribulus terrestris L. (Gokhru, Mithu Gokh-aru, Akanti).

The fresh leaves are eaten as vegetable. The dried spines of the fruit are said to be employed in urinary disorders. Common.

AVERRHOACEAE

Averrhoa carambola L. (Kamarakh).

The ripe fruits are sweetish acidic and edible. Jams are prepared out of them. Medicinally they are employed in bleeding piles. The ripe fruit juice is a laxative and it also removes stains on clothes.

OXALIDACEAE

Biophytum sensitivum (L.) DC. (Risamnu, Zarero).

The leaf paste is applied to wounds and cuts to stop bleeding. It is also a tonic. The root decoction is given to treat ordinary fevers.

Oxalis corniculata L. (Changeri, Navari).

The leaves are chewed as they are mildly acidic and refreshingly tasty. Fresh leaves in curries improve the appetite and digestion.

RUTACEAE

Aegle marmelos (L.) Corr. (Bili).

The leaves are much revered by Hindus. The leaf decoction is used for bath after fevers. The unripe pulp is reputed antidyenteric.

Limonia acidissima L. (Kothi, Kotha).

The ripe pulp is sweet and made into jam, chuttny etc.

SIMAROUBACEAE

Allanthurus excelsa Roxb. (Rukhdo, Motoarduso)

The bark and the leaf infusions are given to ladies as tonic after child birth. The leaf juice mixed with coconut milk is said to cure rheumatism.

BALANITACEAE

Balanites aegyptiaca (L.) Del. (Ingorio, Hing-oriyo)

The acidic fruit juice removes stains on clothes. Roasted seeds are given in cough. The bark, unripe fruit and leaves are pungent, bitter, purgative and anthelmintic and often used as vermifuge in children. The oil, expressed from the seeds, is employed in treating burns.

BURSERACEAE

Boswellia serrata Roxb. (Gugal, Dhupel o).

The gum is used in dysentery and diarrhoea and in the preparation of ointment for sores and external skin eruptions.

Commiphora wightii (Arn.) Bhandari (Gugal).

The resin or "dhup" is used for religious purposes, though basically the smoke is mosquito repellent.

Garuga pinnata Roxb. (Kakad, Kakadio).

The leaf juice is astringent. It is mixed with that of *Adhatoda vasica* (L.) Nees, *Vitex trifolia* L. and honey and is given in asthma.

MELIACEAE

Azadirachta indica A. Juss. (Limdo).

The tender twigs are used as tooth brushes. The smoke of dried or fresh leaves is effective to evade mosquitoes.

Soyimida febrifuga (Roxb.) A. Juss. (Ragat,

Rohido, Roha, Royan).

The bark and leaves are bitter and used in dysentery and malarial fevers. The gum is said to be helpful in blood-pressure.

CELASTRACEAE

Celastrus Paniculata Willd. (Malkagani, Maikankni).

The oil extracted from the seed is variously used commercially. The seeds are administered internally in small doses as a stimulant and in rheumatic pains.

Maytenus emarginata (Willd.) D. Hou (Vico, Vicklo).

The fruit is a blood purifier. Locally the dried twigs are used as fences, and the fresh ones in religious ceremonies.

RHAMNACEAE

Ziziphus mauritiana Lam. (Bor).

The fruit is edible. The leaf paste is applied to treat scorpion stings.

Ziziphus nummularia (Burm. f.) W. & A. (Chani, Bor, Palia).

The fruits are edible. The dry branches are used for fencing.

Ziziphus oenopia (L.) Mill. (Boydi, Novelo, Eramdi).

Locally the fruits are edible. The wood is used as fuel and dried-branches as fences. The bark is a febrifuge and digestive tonic.

Ziziphus rugosa Lam.

The fruit is edible. The flowers with an equal quantity of petioles of the betel leaf are crushed in lime water and given in the case of menorrhagia.

VITACEAE

Ampelocissus latifolia (Roxb.) Planch. (Jangli Drash).

The root decoction is given to ladies in cases of menstrual troubles. The fruits are edible.

Cayratia carnosa (Roxb.) Gagnep. (Khat-Khatumbo).

A leaf paste is applied to treat sores and ulcers on the necks of bullocks. The ripe fruits are edible. Common.

Cissus quadrangulare L. (Hadasankal).

The fruits are refreshingly tasty and the root decoction is said to be used in curing dysentery and given internally in digestive disorders. The fresh stem pieces are pickled.

LEEACEAE

Leea indica (Burm. f.) Merrill

The root decoction is said to be used in diarrhoea and chronic dysentery.

SAPINDACEAE

Cardiospermum halicacabum L. (Tejovati, Kapalbhodi).

The leaves, roots and seeds are medicinally used in lung diseases, rheumatism and stiffened limbs, in ear pains and eye sores.

Sapindus laurifolius Vahl (Aritha, Ritha).

It is a good shade tree. The dried fruits are substitute for soap, especially for shampooing ladies' hair. Both the root and fruit are given as anthelmintic.

Schleichera oleosa (Lour.) Oken (Kusum, Kosimb).

Superior quality of lac is produced from this plant. An oil obtained from seeds is used in skin rash and rheumatism.

ANACARDIACEAE

Anacardium occidentale L. (Kaju).

The roasted nuts and ripe fleshy peduncles are edible. The tree are planted.

Buchanania lanzan Spr. (Charoli).

The seeds are eaten and used by *adivasis* as brain tonic.

Lannea coromandelica (Houtt.) Merr. (Modhad, Moyno, Madhol, Miniyo).

The leaf paste is applied to treat sprains and elephantiasis. A lotion is prepared from the bark to wash obstinate ulcers. The resin from the bark is used by fisherman for colouring the net which makes it durable also.

Mangifera indica L. (Keri, Ambo).

Medicinally the unripe fruits are constipating and therefore useful in diarrhoea, but the pulp of the ripe ones is laxative.

Semecarpus anacardium L. (Silva, Bibbo, Bhilamo).

The juice of the fruit is used in preparing washermans' ink. The oil from the seeds is used in the treatment of skin eruptions and rheumatism. The receptacles are eaten after roasting.

MORINGACEAE

Moringa olefera Lam. (Saragvo, Segta.)

The leaves, flowers and fruits are used in curries or as vegetables and the leaves and tender shoots as fodder.

PAPILIONACEAE

Abrus precatorius L. (Gunj, Chanoti, Rati).

Dry leaves chewed with betel pan. The seeds, though poisonous, are sometimes used externally in localized paralysis. The leaf paste is employed as a germicide to dress wounds in domestic animals.

Alhagi pseudalhagi (M. Bieb) Desv.

It is a common fodder for the cattle and especially camel during summer and in times of scarcity even goats consume it. The flower paste coagulates the blood. The leaf decoction is used in fever. Asthmatic persons

sometimes inhale the leaf smoke.

Arachis hypogea L. (Mungfali, Bhonying).

This is a valuable chief cash crop of Saurashtra for the oil used in culinary throughout Gujarat. The roasted seeds are eaten.

Butea monosperma (Lam.) Taub. (Khakhara, Palaa.)

The dry leaves are stitched together to form large dinner plates. The flowers yield a fast saffron yellow dye. In India this plant ranks next to *Schleichera oleosa* Oken as a host tree for the lac insect.

Cajanus cajan (L.) Millsp. (Tuver, Tur).

The seeds are an important pulse all over India. The water boiled with leaves is used for gargling by the tribals.

Canavalia gladiata (Jacq.) DC. (Abbo, Alad, Tarvardi).

The tender pods are made into vegetable by poor people.

Crotalaria burhia Buch. - Ham. (Kharshan, Vagdaushan).

The paste of aerial parts of the plant is sometimes used as a cooling medicine in burns.

Crotalaria juncea L. (Shun, Shan, Shaniyu).

It is cultivated as a fodder plant. The fibres from the cortex are used as cordage and threads knitted into mattresses for the cots.

Cyamopsis tetragoloba (L.) Taub. (Gawar, Guwar).

The tender pods of glabrous variety are cooked as vegetable, whereas those of coarse variety make an excellent fodder for cattle. They increase milk secretion in buffaloes, cows etc.

Derris indica (Lam.) Bennet (Karanj).

The oil extracted from the seeds is employed in skin diseases.

Indigofera caerulea Roxb. var. *monosperma*
Santapau

Locally the branches are sometimes used
as tooth brushes.

Indigofera oblongifolia L. (Zil, Ziladi).

The tribals use the root, boiled in milk as
a purgative.

Medicago sativa L. (Lachko).

Cultivated as a fodder plant.

Mucuna purita Hk. f.

Seeds are roasted and eaten by *maldharis*
for improving the digestion. The hairs on the
pods are said to be vermifuge.

Psoralea corylifolia L. (Bavachi, Babchi,
Gawar).

The seed paste in oil is applied on the
affected parts in skin diseases and leucoderma.

Pueraria tuberosa (Roxb.) DC. (Vidarikand).

The tuberous roots are edible and a good
tonic.

Rhynchosia minima (L.) DC. var. *minima*.
(Dariave).

The leaf infusion is used in piles and
asthma.

Vigna aconitifolia (Jacq.) Marechal (Math).

The dry seeds constitute one of the pulses
and the leaves as a fodder. Cultivated.

Zornia gibbosa Span (Samarapani).

The root decoction is somewhat seda-
tive and the tribals give it to the children to
induce sleep.

CAESALPINIACEAE

Bauhinia racemosa Lam. (Asotri, Apto).

The leaves are used as bidi wrappers.

Caesalpinia cristata L.

The seeds are medicinally used as one of
the ingredients of a mild laxative for children.

Cassia absus L. (Chimed, Chon).

The dry powdered leaves are used for
dressing ulcers.

Cassia auriculata L. (Aval, Avali, Avar).

The plant is valuable in the reclamation
of sandy waste land. The tender branches are
used as tooth brushes. The seeds are used in
ophthalmia.

Cassia fistula L. (Garmalo).

The pulp of the pod is used as a tonic,
safe purgative and in chest infections.

Cassia tora L. (Kuvadiao, Pochandio).

Both leaves and seeds are used in skin
diseases. Tender shoots and leaves are used as
vegetables. The seed is sometimes used as an
adulterant to coffee powder after roasting.

Saraca asoca (Roxb.) de Wilde (Ashok).

The bark decoction is given in urinary
troubles, especially in menorrhagia and mens-
trual disorders in ladies.

Tamarindus indica L. (Amli, Amblijozad.)

The pulp of ripe fruit is used in culinary.
The leaves are also acidic in taste.

MIMOSACEAE

Acacia chondra (Roxb. ex Rottl.) Willd. (Kair,
Kbair).

The bark yields tannin similar to *kattha*
which is astringent and applied to boils and
ulcers as antiseptic.

Acacia nilotica (L.) Del. subsp. *indica* (Bth.)
Brenan (Baval, Kalobaval).

The leaves and tender shoots are used as
cattle fodder. It is used as fuel. The fibre
from the bark is locally used to tie grass loads.
The tender branches are used as tooth brushes.

Acacia senegal (L.) Willd. (Goradio Baval).

The edible gum is often used as an ingre-
dient in many sweet culinaries.

Acacia torta (Roxb.), Craib. (Chilar).

The dried bark is used as a substitute for soap by tribal women to wash hair.

Dichrostachys cinerea (L.) Wt. & Arn. (Mordhundhiyu).

The wood is used as fuel.

Pithecolobium dulce (Roxb.) Bth. (Gerasamli, Vilayti Amlil).

The leaves are used as cattle fodder. The aril is edible.

Prosopis juliflora (Sw.) DC.

The tender leaves serve as good fodder for cattle in arid lands.

COMBRETACEAE

Anogeissus latifolia (Roxb.) Wall. ex Bedd. (Dhavdo, Dhamod).

The pungent root decoction is said to be given in stomach-ache whereas the bark decoction in liver complaints.

Terminalia bellirica (Gaertn.) Roxb. (Behda, Beda).

The unripe fruit is purgative and it is one of the ingredients of the *churna trifala* which is a mild laxative. It is also said to be used in bronchitis and asthma.

MYRTACEAE

Syzygium cumini (L.) Skeels (Jambu).

The fruits are edible. Locally the seed powder is used by the tribals supposedly as a cure for diabetes.

LYTHRACEAE

Ammannia baccifera L. (Jalagio, Lalagio).

The leaf juice is used to raise blisters which then help to relieve rheumatic and gout pains.

Lawsonia inermis L. (Mendhi).

A very good hedge plant. The dried

leaf powder is used to dye hair, nails, palms and feet.

Punica granatum L. (Dadam).

The juice of the fruit rind alongwith curd is given in diarrhoea. The root bark is said to be specific against tape-worms.

PASSIFLORACEAE

Passiflora edulis Sims. (Krishna Kamal).

The ripe fruit is edible.

CARICACEAE

Carica papaya L. (Papaya, Papayu).

The raw fruits are pickled and employed in making meat tender. The milky juice is applied on ring worms and the ripe fruit is sweet and tasty.

CUCURBITACEAE

Citrullus colocynthis (L.) Schrad. (Indravarna, Kokadvarna).

The fruits and seeds are very bitter and their powder is a purgative.

Coccinia grandis (L.) Voigt (Chiloda, Tindora, Tondli).

The unripe berries are used as vegetables. The mucilage from the young fruits and roots is said to be used in diabetes.

Momordica charantia L. (Karela, Kareli).

The unripe fruits are used as vegetable. The root and fruit are said to be effective in rheumatism. The persistent use of bitter unripe fruits, alongwith other precautionary measures, seems to control diabetes.

Momordica dioica Roxb. ex Willd. (Kankonda, Kantola, Vanz Kantoli).

The unripe fruit is one of the monsoon vegetables.

CACTACEAE

Opuntia elator Mill. (Fafdothor).

The plants make useful hedges, at times as fodder after scrapping of spines.

MOLLUGINACEAE

Glinus oppositifolius (L.) DC.

The plant juice is applied for rash and skin infections.

APIACEAE

Anethum graveolens L. (Suwa).

Locally the fruit is used as condiment in culinary. The fruit decoction is used to relieve stomach pains in the children.

ALANGIACEAE

Alangium salvifolium (L.f.) Wang. (Ankol, Ankoli).

The fruit is edible, sweet and tasty.

RUBIACEAE

Adina cordifolia (Roxb.) Bth. & Hk f. ex Brand. (Haldarvo, Haldu, Haldavan).

The leaf juice is used as an antiseptic in dressing wounds.

Borreria articularis (L.f.) F.N. Will (Ganthiu, Kharsatshankho).

The seeds are used locally as a substitute for coffee powder.

Hymenodictyon excelsum (Roxb.) Wall. (Bham-marchal Boisal, Pariani).

The bark is very bitter and is a substitute for quinine to treat malaria.

Ixora arborea Roxb. (Naveri).

The wood is hard and close grained, and is used for making walking sticks.

Oldenlandia corymbosa L. (Parpat, Parpati).

The whole plant, especially the root decoction, is used in the treatment of fever, jaundice and diseases of liver.

Xeromphis spinosa (Thunb.) Keay (Mindhal, Mindhol, Medhelo).

The fruit is a strong fish poison. The fruit has emetic properties. It is largely used in religious ceremonies.

ASTERACEAE

Artemisia parviflora Buch. (Kirmani, Dhor Davana).

The dried branches are kept in clothes to keep off moths. The plant juice is applied on the forehead of children in case of convulsions.

Eclipta alba (L.) Hassk. (Bhangro).

A hair oil is prepared from leaves. The plant is a good tonic for certain diseases of the spleen, bronchitis, asthma and leucoderma. The leaf juice is applied after "tatooning".

PLUMBAGINACEAE

Plumbago zeylanica L. (Chitrak, Chitro).

The roots are said to be effective for abortion.

OLEACEAE

Schrebera swietenoides Roxb. (Mokha, Mokh).

The leaf juice is applied to relieve toothache and sometimes painless removal of teeth.

APOCYNACEAE

Carissa congesta Wt. (Karvanda, Karmda).

The ripe fruits are edible.

Ervatamia divaricata (L.) Burkill (Chandni, Taggar).

The juice of the flower buds mixed with milk is given to treat reddening of eyes due to foreign particles.

Holarthra antidysenterica (L.) Wall. ex G. Don (Indrajav, kudo).

The bark decoction and powdered seeds are given in bronchial fevers.

PERIPLOCACEAE

Hemidesmus indicus (L.) Schult. (Dudhuel, Dudhli, Sariva).

The root decoction is administered in ordinary fever. The fruit decoction mixed with the decoction of the fruits of *Terminalia bellirica* (Gaertn.) Roxb., *Emblia officinalis* Gaertn. and roots of *Oldenlandia corymbosa* L. is given in acute fever, cold and cough. The root is a blood purifier and it reduces blood pressure.

SOLANACEAE

Physalis minima L. (Popti, Parpopti).

The plant is a bitter tonic, useful in abdominal troubles.

Solanum incanum L. (Ubhi Ringni).

The flower buds are used by tribals to dye eyes red on auspicious occasions.

SCROPHULARIACEAE

Bacopa monnieri (L.) Penell. (Bam, Jainaveri).

After sweetening the plant juice with sugar and mixed with ginger juice and bark extract of *Moringa oleifera* Lam. it is given to the children in stomach disorders. It is also a nervine tonic, but the leaf juice as such is applied on rheumatism.

PEDALIACEAE

Pedallium murex L. (Ubhu, Gokharu).

The whole plant is a tonic. The fruit is anti-spasmodic and aphrodisiac. The fresh leaves and stem kept in water over night will turn into a thick mucilage gel which the tribals believe to be a good tonic and useful in treatment of venereal diseases and sexual disorders including impotency.

ACANTHACEAE

Adhatoda vasica (L.) Nees (Arduso).

The leaf decoction is given in common fever, cough and cold and in asthmatic treatment.

VERBENACEAE

Tectona grandis L. f. (Sag).

The leaves because of their size are sometimes used as dinner plates. The tree is one of the best timber trees in Gujarat.

LAMIACEAE

Leucas aspera Spr. (Kubi).

The tender shoots are consumed as vegetables.

Ocimum sanctum L. (Tulsi).

The leaves are used for flavouring tea. A strong decoction of leaves in tea brings down the fever by producing excessive perspiration in the patient. It is also effective in bronchitis and gastric disorders in children.

EUPHORBIACEAE

Emblia officinalis Gaertn. (Ambla).

The fruits are eaten raw or variously pickled into jams. They are one of the important ingredients of *Trifala churna*.

Euphorbia hirta L. (Nagul, Dudhalo, Rati).

The leaf paste and juice are applied on ring worms and scabies.

LILIACEAE

Aloe barbadensis Mill. (Kenvar Patho).

The fresh juice from the leaf is used by tribal ladies for hair wash. The mucilaginous leaf pulp is applied to the parts affected by rheumatic pain.

ARECACEAE

Phoenix sylvestris (L.) Roxb. (Khajuri).

The leaves are made into fine brooms and mats.

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