

Some common plants used by *Kurichiar* tribes of Tirunelli forest, Wayanad district, Kerala in medicine and other traditional uses

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The paper enumerates the traditional uses of 48 plants used by *Kurichiar* tribes inhabiting the Tirunelli forest of Wayanad district in Kerala. Information on the medicinal and other traditional uses gathered from the tribals together with their botanical identity is presented.

Keywords: Ethnomedicine, Medicinal plants, *Kurichiar tribes*, Kerala

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Wayanad, one of the hill stations of Kerala, is located at about 76 km East of the coastal city Kozhikode. It lies at an elevation of 700 to 2,100 m above sea level. The name, Wayanad, is believed to have been derived from the word, *Vayalnadu*, meaning the land of paddy fields. The altitudinal difference within the district results in climatic variations, which in turn determines the vegetation pattern. This district has the highest concentration of tribals in Kerala. They form 17.1% of the total population of the district. The aborigines of Wayanad have a great political tradition. This area was originally under the control of the *Rajas* of the *Veda* tribes. Later, the political authority was passed on to the *Pazhassi Raja*'s of Kottayam royal dynasty. The *Kurichiars* of Wayanad have a great martial tradition and they constituted the army of *Pazhassi Veera Kerala Varma Rajah*, who engaged the British forces in several battles. The descendants of those warriors are still expert archers¹. In order to explore the medicinal plant wealth, an ethnobotanical exploration was carried out in the Tirunelli forest area. During the survey, two local guides and a *Nattuvaidya* belonging to the *Kurichiar* community, accompanied for helping in locating the medicinal plants and documenting their uses. The paper adds up further to the initiative on documentation of traditional knowledge by giving the uses on 48 plant species.

The study area is Tirunelli and Pakshipathalam located near Manandavadi of Wayanad district in Kerala, situated at 11° 55' N latitude and 75° 59' E longitude with an altitude ranging from 950-1,350 m above sea level (Fig. 1). The temperature goes down to 16°C during the winter season and to 30°C during the summer months. The annual rainfall ranges from 300-1,000 mm. The forest types are semi-evergreen, evergreen and grasslands².

Methodology

The information on various medicinal plants were gathered from Achappan, 58 yrs old man and Rajan, 38 yrs old of the *Kurichiar* community, residing in Tirunelli tribal colony. They explained the medicinal uses and gave the local names of every plant collected. Such plants were collected, tagged and entered in the field data book together with important botanical notes for herbarium specimens. All the species were identified and the voucher specimens deposited in the CMPR herbarium.

Results

During the survey, 48 common plant species used by the tribal community of that area for primary healthcare and other folk uses were identified (Figs 2-13). The species are enumerated in alphabetical order with details such as botanical name, family, local name and uses.

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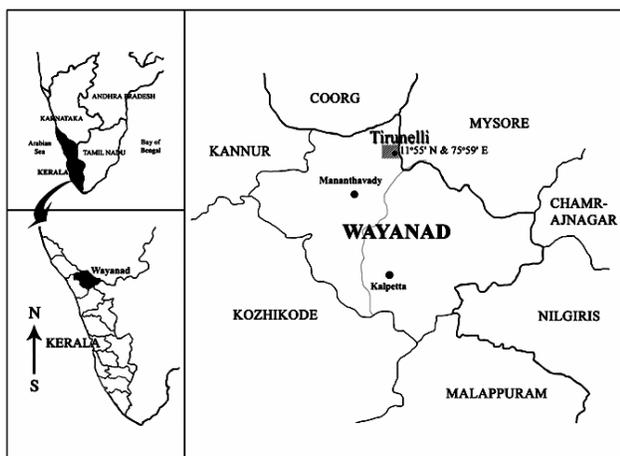


Fig. 1—Location map of study area

Enumeration

Acacia sinuata (Lour.) Merr., (Mimosaceae),
Cheenikka

Uses: Fruits crushed and put in water; water is applied over foot to repel leeches.

Adiantum caudatum L., (Adiantaceae), *Pannal*
Uses: Fronds paste mixed with a small quantity of lime is applied externally several times for 2-3 days for removing warts.

Arenga wightii Griff., (Arecaceae), *Nettippana*
Uses: Crushed stem pith mixed with large quantity of water is kept for sedimentation of the starch. Water is drained, the sediment is sun dried and the powder is administered for one week in painful urination, colour change of urine and leucorrhoea.

Bambusa bambos (L.) Voss., (Bambusaceae), *Mula*
Uses: Paste of tender culm piece is applied externally twice a day for curing old wounds of cattle. Tender shoot is crushed with egg and administered for curing body pain and also for improving general health.

Briedelia scandens (Roxb.) Willd.,
(Euphorbiaceae), *Nendra valli*
Uses: Half ripe fruits are eaten for curing ulcers in mouth. Crushed bark mixed in toddy is filtered after one hour and consumed to increase the *kick*. Bark juice is given internally after dinner for better bowel movement and is also believed to be an aphrodisiac if consumed for a week.

Calamus thwaitesii Becc. & Hook.f., (Arecaceae),
Chooral
Uses: Seed powder when administered in 2-3 months of pregnancy is considered as abortifacient. Seeds

decoction is given on the first three days after menstruation for preventing pregnancy.

Careya arborea Roxb., (Lecythidaceae), *Pezhu*
Uses: Dried bark powder is applied over fresh wounds for fast healing. For curing diarrhoea and dysentery, the inner bark (phloem portion) is scraped, boiled in two glasses of water in an iron vessel, reduced to half is filtered and administered twice a day.

Colebrookea oppositifolia Smith, (Lamiaceae),
Vella kuringi
Uses: Stem is used for making fire. For this, two pieces of mature dried wood are taken and a small hole is made on one piece. One end of the other piece made into a sharp point is inserted in the hole and rotated fast with both hands, when the friction leads to the initiation of fire. A piece of paper or coconut husk is put near the hole, which gets ignited soon.

Cyathula prostrata (L.) Blume, (Amaranthaceae),
Cheru kadaladi
Uses: Leaf juice is applied externally for getting immediate relief from sprain.

Cyclea peltata (Lam.) Hook.f. & Thoms.,
(Menispermaceae), *Pada kizhangu*
Uses: One spoon of powdered root tuber mixed in half glass of diluted curd is taken for 8 consecutive days to cure piles. A few pieces of root kept in gingelly oil (*Sesamum indicum* L.) for one month oil is applied on foot to avoid leech-bite in forests.

Dioscorea belophylla Voigt., (Dioscoreaceae),
Arikkizhangu
Uses: Tubers are edible.

Diploclisia glaucescens (Blume) Diels,
(Menispermaceae), *Malathangi*
Uses: Mixture of plant leaves, gingelly oil and coconut (*Cocos nucifera* L.) oil (100 ml each) is heated and applied externally for sprain.

Diospyros montna Roxb., (Ebenaceae),
Kalkkutty maram
Uses: Bark juice (one spoon) is administered twice a day to children suffering from stomach pain. Crushed leaves are applied in small ponds to stupefy fishes.

Elephantopus scaber L., (Asteraceae), *Anachuvadi*
Uses: Mixture of whole plant, gingelly oil and coconut oil (100 ml each) is heated and applied externally for sprain.

Embelia ribes Burm.f., (Myrsinaceae), *Mani valli*
Uses: The exudates from the cut stem are administered in painful urination and kidney disorders.

Ensete superbum (Roxb.) Cheesman, (Musaceae),
Kallu vazha
Uses: One spoon of seed powder boiled in 1 glass of milk is given for a week to cure leucorrhoea.

Erythrina stricta Roxb., (Fabaceae), *Murikku*
Uses: Bark juice is administered for one week, daily in the morning to cure leucorrhoea and excessive thirst.

Glycosmis pentaphylla (Retz.) DC., (Rutaceae),
Paanal
Uses: Crushed root piece mixed in water is administered in empty stomach, preferably in the morning, for curing stomach pain. The treatment is continued for 3 days.

Gnetum edule (Willd.) Blume, (Gnetaceae),
Karanamuttu valli
Uses: Mature fruits are fried and eaten.

Gynura nitida DC., (Asteraceae), *Analivenga*
Uses: Crushed rhizome boiled in milk is administered in cases of suspected snake-bite. The healer keeps a small piece of crushed rhizome in his mouth and suck out impure blood from the spot of bite after widening it with a sharp knife.

Helicteres isora L., (Sterculiaceae),
Edampiri valampiri
Uses: Mature fruits crushed and boiled in gingelly oil are applied externally for curing rheumatic complaints.

Hemidesmus indicus (L.) R.Br., (Periplocaceae),
Nannari
Uses: Root bark powder boiled in milk is administered early morning for one week to cure stomach disorders and also as a blood purifier.

Justicia wynaadensis (Nees) Heyne ex Anders., (Acanthaceae), *Kattu vatamkodi*
Uses: Leaves crushed and boiled in coconut oil is applied externally over rheumatic swellings.

Lobelia nicotianaefolia Roth ex Roem. & Schult., (Lobeliaceae), *Kattu pukayila*
Uses: Leaf paste mixed with a pinch of lime is applied to foul smelling wounds of cattle for speedy healing.

Mallotus philippensis (Lam.) Muell.-Arg., (Euphorbiaceae), *Sindooram*
Uses: White portion of an egg added to paste of plant bark, two prawns, pieces of *Pandanus odoratissimus* L.f. (*Kaitha*) prop roots kept over night is applied externally and tied with a cloth piece in case of bone fracture. In certain cases, bamboo splints are used as a support to strengthen the bones.

Michelia champaca L., (Magnoliaceae),
Chembakam
Uses: Mature seeds powder is applied over foot to repel leeches.

Mimosa pudica L., (Mimosaceae), *Tottalvadi*
Uses: Leaf paste is applied over wounds for speedy healing. Leaf juice of *Ageratum conyzoides* L. as well as *Chromolaena odorata* (L.) King & Robins. (Asteraceae) commonly known as *Appa* is also used for wound healing.

Naravelia zeylanica (L.) DC., (Ranunculaceae),
Vatakodi
Uses: Leaf paste is applied on forehead for curing headache. The same paste inhaled through a cloth piece is said to give relief in cold.

Naringi crenulata (Roxb.) Nicos., (Rutaceae),
Narinaranga
Uses: Bark juice is applied externally for getting speedy relief in sprain.

Nothapodytes nimmoniana (Graham) Mabb., (Icacinaceae), *Savam nari*
Uses: Tender stem bark powder mixed in hot water is administered for curing internal tumour and bleeding. The treatment period is decided by the healer, considering the age and severity of the disease.

Osbeckia muralis Naud., (Melastomataceae),
Atirani
Uses: Flower decoction is given to children suffering from itching and skin diseases.

Persea macrantha (Nees) Kosterm., (Lauraceae),
Kulirmav
Uses: Bark extract, jaggery and cow dung is used for smearing the mud floor.

Persicaria chinensis (L.) Gross., (Polygonaceae),
Cheral
Uses: Boiled tender shoots are given to pregnant women for increasing general health.



Phoenix loureirii Kunth var. *humilis* (Becc.) Barrow, (Arecaceae), *Katteenthal*
Uses: The top portion of the palm is cut, and the innermost tender portion is collected and eaten. The spines of leaves are poisonous, when wounded the affected portion is treated in lukewarm salt water.

Phyllanthus emblica L., (Euphorbiaceae), *Nelli*
Uses: Bark decoction is given to patients suffering from a magical poisonous potion (*Kai Visham*); also for curing stomach related problems.

Pterocarpus marsupium Roxb., (Fabaceae), *Venga*
Uses: Vessel made of the heartwood of this tree is used in the treatment of diabetes. Water poured in the vessel kept overnight is administered in empty stomach early morning for three months to cure diabetes. *Kino* wood powder mixed in coconut oil is applied over sore foot.

Remusatia vivipara (Roxb.) Schott, (Araceae), *Kattu chembu*
Uses: For the treatment of reddish boils, raw rice powdered with tubers of the plant is applied externally for 2 days. The tubers are consumed as a vegetable during the month of *Karkidakam* (July-August).

Rubus glomeratus Blume, (Rosaceae), *Chora pazham*
Uses: Ripe fruits are edible.

Selaginella involvens (Sw.) Spring, (Selaginellaceae), *Garuda pacha*
Uses: It is considered as a strong anti-poison. In all kinds of poisonous affections, fronds ground with fresh rhizome of *Curcuma longa* L. (*Manjal*) is applied externally for one week. For curing leucorrhoea, fronds paste mixed with tender coconut water is administered twice a day for three days.

Sterculia guttata Roxb. ex DC., (Sterculiaceae), *Venda maram*
Uses: Kernels are roasted and eaten.

Syzygium cumini (L.) Skeels, (Myrtaceae), *Njaval*
Uses: Ripe fruits are edible. Plant bark is used for the preparation of country alcohol.

Tabernaemontana heyneana Wall., (Apocynaceae), *Paala*
Uses: Fruit latex is applied over inflammatory boils to burst.

Tetrastigma sulcatum (Laws.) Gamble, (Vitaceae), *Adavalli, Katta valli*
Uses: Bark is stripped off in convenient size to tie harvested paddy to bundles for easy transportation.

Themeda triandra Forssk., (Poaceae), *Pullu*
Uses: Shoots are used to thatch huts. Shoots are collected during November and December, stacked for a small period and used.

Thottea siliquosa (Lam.) Ding Hou, (Aristolochiaceae), *Alpam*
Uses: Half mature fruit is eaten thrice a day to cure stomach pain.

Toddalia asiatica (L.) Lam., (Rutaceae), *Kokka mullu*
Uses: Leaf paste is administered twice a day for getting fast relief in breathing trouble.

Tragia involucrata L., (Euphorbiaceae), *Kodithuva*
Uses: Paste made from the roots, running to the eastern direction is applied externally on forehead early morning for three consecutive days to cure migraine. Paste of plant root, *Semecarpus anacardium* L.f. (*Cheru*) bark and *Ricinus communis* L. (*Avanakku*) leaf juice is applied twice a day over itches and similar skin diseases.

Ziziphus rugosa Lam., (Rhamnaceae), *Kotta*
Uses: White coloured ripe fruits are edible.

Discussion

Forest tribes are the most deprived groups in Indian society possessing little human and physical capital, often facing economic and social exclusion. Poverty is higher among tribal population. The 1998-99 censuses identified that 80% of tribals living in Wayanad were far below poverty line³. There are a number of different tribal populations living in Wayanad, including *Paniyas*, *Kurichiar*, *Kurunas*, *Irulas* and *Kattunayakkas*. The *Paniyas* are landless and have few assets, while the *Kurichiar*s own land and are considered to be at a higher level of civilization⁴. It is important to provide them the basic necessities of life to ensure their improvement in Socio-cultural and spiritual levels.

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