

PLANTS FROM THE TRADITIONAL MEDICAL SYSTEM OF THE NILGIRI TRIBES

S.RAJAN, M.SETHURAMAN* and D.SURESH BABURAJ

Survey of Medicinal Plants & Collection Unit, Udhagamandalam – 643 002, Tamil Nadu
Department of Medical Anthropology, Tamil University, M. Palada,
Udhagamandalam – 643 004, Tamil Nadu*

Received: 7 May, 1996

Accepted: 22 July, 1996

***ABSTRACT:** This study highlights the medico-ethno botanical information interviewed from Nilgiri tribes. The results of this study brought forth 41 medicinal applications involving 34 plants that have been found incorporated into their traditional therapeutic realm of herbal cure for various common ailments the observations are discussed in the light of cross-cultural perspective among Nilgiri aborigines.*

INTRODUCTION:

The Nilgiri district popularly known as “The Blue Mountains” harbouring indigenous and Exotic flora of excellent therapeutic potential and becomes a vital place for medical ethno-botanical as well as anthropological studies. The district lies between 11° 12' and 11° 43' N and 76° 14' and 77° 1' E in the western ghats comprises four taluks namely, Udhagamandalam, Coonoor, Kotagiri and Gudalur stretching for 2542 sq kms the annual rain fall of this district ranges from 1600-1800 mm. Which favours the growth of rain forests engendering rich diversity of medicinal plants and other interesting floristic elements.

The total tribal populations of the district was 21,368 of which the tribe-wise distribution is as follows; Todas 1,600; Kotas 1894; Kurumbas 4874; Irulas 5900; Paniyas 5700 and Kattunayaks 1400 (Anonymous, 1981).

In all ages and civilizations man's continuous search for curative plants to treat

common diseases is well-chronicled. The use of plants as medicines in different cultures, however, emerged with man's evolution (Farausworth, 1984; Phillips, 1992). The origin of different medical systems is due to the concerted efforts made by the early man to treat ailments in his own environment employing folk-beliefs and traditional herbal practices. The knowledge on indigenous plants and its uses can be vital for health development workers as well as for the local population. Hence, an elaborate research thrust to document information on plant based herbal treatments on different ethnic groups is in rapid increase (Abraham, 1993; Breaks, 1873; Hockings, 1989; Ragunathan, 1976; Rajan, 1992 and Dhanasekaran et. al 1993 & 1994).

AN ETHNO GRAPHIC ACCOUNT OF NILGIRI TRIBES:

The district consists all in all six tribal groups of incredibly high anthropological significance. They are Todas, Kotas, Kurumbas, Paniyas, Irulas and Kattunayaks

living all along the length and breadth of nilgiri district. A piece of silk carbon-dated to 1200 B,C attest to hoary occupation of the nilgiri by these tribal groups (Hockings, 1975).

TODAS:

They are professional dairy men and pastoralists living in the higher altitudes of the district in the traditional houses called "Munds". Todas along represent a purely pastoral economy in India today. The community has two exogamous divisions called tarthar and teivali. There are five socially distinguishable sects (clans) such as. Pelki, pekkan kuttan kenna and Jodi. Todas tenaciously maintain their rich cultural heritage and religious identity (Rajan & Sethuraman, 1993)

KOTAS:

The kotas are musicians and excellent craftsmen having mastery over ironworking. Traditionally, their distribution in the nilgiri district is confined only to seven villages inhabiting in moderate altitude of the district namely: New kotagiri (Aggal), Kil-Kotagiri, Kundah, Kallimalai gudalur, trichigadi and sholur kokal (rajan & sethuraman, 1991). Each village has three Keri known as kizhkeri Nadukeri and Melkeri. Members living in the same Keri are considered as brotherly clan and hence no marriages are permissible. Keri exogamy is note-worthy among kotas. They have elaborate ritual practices and their own method of worshipping their family good kambattrayan.

IRULAS:

The Irulas are distributed in the lower altitudes of the nilgiri hills (district). They are dark complexioned whose chief occupation is wage –earning as plantation

labourers in the estates. The community divided into seven clans (sects) an they are: Kupper, sambe, Kalkatti, Kurunagar, Devanan, peradar and punger (Rajan & sethuraman, 1933). Marriage practices are regulated by clan exogamy. Irulas are proficient in magco-religious cure for scorpions dog, and snake- bites.

KURUMBAS:

The Kurumbas practice hunting food gathering economy, well-versed in honey collection techniques. They are plain dwelling people living in the interior for ests of the district. Their staple foods are wild tubers (*Dioscorea bulbosa*), wild fruits and other minor forests produces kurumbas are considered to be experts is magico-religious and witch craft practices they are heterogenous population having divisions such as Halu kurumbas, betta kurumbas, Mull Kurumbas, Jess kurumbas and Urali Kurumbas.

PANIYAS:

The paniyas are dark skinned people living in bamboo huts at the junction of bordering place of Kerala and Tamil Nadu. They work as labourers with wayanad chettis. Their economic status and the educational attainments are very low they possess excellent skills in the art of fishing by employing certain plant parts like bark of *Eugenia* sp. And leaves of *Aibizzia* sp. As stupefying agents.

KATTUNAYAKAS:

They are another group of forest dwellers who are nomadic in nature, their staple foods are honey, wild fruits and tubers. Eating bison flesh is a cultural taboo with them. The social customs and religious practices of kattunayakas are akin to

kurumbas in many respects. They have curly hair and speak kannada language.

METHODOLOGY:

Elderly persons who have a practical know how of plants used in traditional system of medicines were interviewed. The plants have been arranged in alphabetical sequence tribe-wise. An abridged description of the plants, their family, tribal names including their medicinal applications to cure difference ailments are furnished herein, the voucher specimens are deposited in the herbarium of survey of medicinal plant & collection unit (SMPCU), Udhagamandalam for reference.

TODAS:

Centella asiatica (L) Urban (Apiaceae), “Vallarai” A stoloniferous herb with rooting at nodes.

Flowers reddish, common in marshy places.

Plant juice is considered as refrigerant to the body, when given orally.

KOTAS:

Achyranthes aspera L. (Amaranthaceae), UTHRUNK”. An erect herb with terminal inflorescence, common.

Leaf paste is applied on cuts, wounds and sores for quick healing.

Datura stramonium L. (Solanaceae), “Umbathi” An erect, branched herb with pale yellow flowers, common in waste places.

Leaf paste is mixed with bit of chunnambu (Calcium hydroxide) is used poultice to reduce inflamed wound and sores.

Lantana camara L. (Verbenaceae), “Thusik”. A armed shrub. Flowers pink or rose, common.

Leaf juice is applied to the gum to stop bleeding and to reduce tooth-ache.

Mirabilis jalapa L. (Nyctaginaceae), “Thottanembi” A slender branched herb. Flowers cream and yellow with white strip, common.

Root/ leaf paste applied on cuts and wounds for quick healing.

Rubia cordifolia L. (Rubiaceae), “Sapli Koth”. A climbing herb with quadrangular stem.

Flowers white, common in shoals

Decoction of stem is orally administered as a restorative tonic. Root juice is given orally to cure jaundice.

Rumex nepalensis spreng. (Polygonaceae), “Kekal Ott” or “Gund Ott” . An erect, annual herb with red flowers, common.

Root juice is orally given on empty stomach as an effective cure for jaundice.

Ruta chalepensi L. (Rutaceae), “Aruvatha Geeda”, An erect, aromatic, woody herb or sub-shrub. Flowers yellow, cultivated. Leaf paste is externally applied to whole body for infants before bathing to protect from convulsions.

KURUMBAS:

Achyranthes aspera L. (Amaranthaceae), “Nayurvi Geeda”. An erect herb with terminal inflorescence, common

Decoction of whole plant with root is orally given for ease child birth and to mitigate labour pain.

Ageratum conyzoides L. (Asteraceae), “Nasar soppu”. An erect, annual herb flowers pale-blue or white, common leaf

juice is orally given as a cure for cough and cold.

Erythroxylum monogynum roxb. (Erythroxylaceae), “Jeevadalli maram” A Small brached tree with white flowers, common in Mudumalai wild life sanctuary. The oil extracted from the wood and stem bark is used to cure all types of acute skin disease.

Passiflora foetida L. (Passifloraceae), “Narati chedi”, A climbing herb, flowers bright pink common. The plant made into paste with water and applied externally on joints to sure from arthritic problems.

Tectona grandis F (Verbenaceae), “Thekku” Large deciduous tree with white bark flowers yellow planted.

Hot water decoction of powdered bark is orally given to pregnant women to ease child birth and to mitigate abdominal pain during labour.

PANIYAS :

Annona squamosa L. (Annonaceae), “Seetha mara”. Small, brached tree with greenish flowers, Commonly cultivat4ed for its fruits.

Hot water decoction of powdered seeds is administered orally as a vermifuge to children.

Macrotyloma uniflorum (Lam.) verdc (Fabaceae), “Kollu”. A climbing herb Flowers yellowish-green cultivated. Hot water decoction of powdered seeds is administered orally to women on empty stomach is early morning the three consecutive days as abortifacient.

Oxalis corniculata L. (Oxalidaceae), “Pulichen segae”, A small hirsute herb with yellow flowers, common in waste place. The whole plant extract in water is orally given for piles and also used as a febrifuge

Psidium guajava L. (Myrtaceae). “Koyyapazham” A branched tree with white flowers, cultivated for its edible fruits Unripe fruits with equal quantity of mango bark (*Mangifera indica*) are powdered and decoction made with hot water is orally given for abdominal discomfort gastric troubles and ulcers in stomach.

Side cordifolia L. (Malvaceae), “Arathae” An woody, branched herb or sub-shrub flowers yellow, common. Leaf past is applied on the site of snakebite as an antidote to get rid or poison.

Tectona grandis L. (Verbenaceae) “Thekku” A large deciduous tree with yellow flowers, planted.

Hot water decoction of powdered bark is orally given to pregnant women to ease child birth and to mitigate abdominal pain during labor.

KATTUNAYAKAS:

Achyranthes aspea L. (Amaranthaceae) “Cherukadalai”. An erect herb with inflorescence terminal spike, common. The whole plant with water is made into paste and applied on body to relive sprain ached in the Joints.

Centella asiatica (L) Urban (Apiaceae), “Gottala”. A stolonierous herb with rooting at nodes. Flowers small reddish, common in marshy places. Plant extract is orally given to allay toothache.

Glycosmis pentaphylla (retz.) DC. (Rutaceae), "Eruputtal". An erect, branched shrub. Flowers white, fruits globose, fleshy, orange when ripe.

Water extract of whole plant given orally to relieve stomach ache and abdominal discomfort.

Rubia cordifolia L. (Rubiaceae), "Muthang". A climbing herb with quadrangular stem. Flowers white.

Hot water decoction of root powder is orally given to relieve pain associated with dysmenorrhoea.

Thunbergia fragrans Roxb. (Thunbergiaceae) "Kakka Valli". A climbing herb with white flowers, common. Root decoction is orally given as an antidote for snake-bite.

RESULT AND DISCUSSION:

This medico-ethno-botanical study carried out on six distinct nilgiri ethos reveals the therapeutic potential of 41 medicinal applications involving 34 plant species to treat different ailments by them.

It is worthy to mention the observation of the use of *Lantana camara* by the todas and Kotas as a styptic agent; *Macrotyloma uniflorum* is used by the todas and paniyas to treat dysmenorrhoea in women also an abortifacient agent; *Achyranthes aspera* is

REFERENCES:

Abraham, Z (1983) Ethnobotanical Notes on the todas, the Kotas the Lulus of nilgiris. In S.K.Jain (Ed) **Glimpses of Indian Ethnobotany**. Oxford IBH, Publishing company, New Delhi, 308 -320.

Anonymous (1981) **Census Report**. Government of India, New Delhi.

used by kotas and krumbas for wound healing and also to ease child birth; *Rubia cordifolia* is used by the kotas and kattunayakas to cure jaundice and also to relieve painful menstruation, *Tectona grandis* used by the Irulas and paniyas to ease child birth by lessening labour pain during deliver.

The profound knowledge of folk beliefs and the traditional curative techniques based on herbal therapeutics can be harnesses for the discovery and isolation of pharmacologically active phytochemical constituents which might open up new vistas in modern medical system through future studies.

It is well established that identical use of same plant by different tribal groups indicate its curative property and therapeutic significant (Jain & shalkarni, 1992; Bhandri et al, 1995). A similar conclusion is arrived at from the above observations on six different tribal groups possible suggesting more or less different cross-cultural knowledge with regard to medicinal plant uses in their surroundings.

ACKNOWLEDGEMENT:

SR and DSB thank to Dr. D.P. Rastogi, director, central council for Research in Homoeopathy New Delhi for the encouragement during the study and MS thanks Vice chancellor, Tamil University, Thanjavur for his valuable encouragement.

Bhandary, M.J. Chandras shekar, K.R and Kaveriappa, K.M (1995) Medical ethnobotany of the siddis of Uttara Kannada district, Karnataka, India. **J Ethnopharmac** 47, 149-59.

Brecks, J.W (1973) **An Account of the primitive tribes and monuments of the Nilgiris**. India Museum, London.

Dhanasekaran, S., Suresh, B., Sethuraman, M., Rajan S. & Duby, R, (1993) Antifertility activity of **ailanthus excelsa** L. in female albino rats. Indian **J. Expr. Biol** 31, 384-385.

Dhanasekaran, S., Ravi shankar,S., Sumitra devei, K., Suresh, B., Sethuraman, M. & Rajan S., (1993) Pharmacological studies of **Araucaria bidwilli Hook** J Ancient sci Life 13 (1&2), 137-142.

Dhanasekaran, S., Ravi shankar,S., Sumitra devei, K., Suresh, B., Sethuraman, M. & Rajan S., (1993) Pharmacological studies of **Araucaria bidwilli Hook** J **Geobios New reports** 13,49-52.

Faransworth, N(1985) How can the well be dry when it is full of water **Econ But** 38, 4-13.

Hockings, P (1975) An Iron Age Burial in south India. **Asian perspectives** 18 (1) 26-50.

Hockings, P. (1989) (E.D) **Blue mountains : The Ethnography and biogeography of a sough Indian region**. Oxford University press, Oxford.

Jain, S.K. and salkarni, A. (1992) Cross-cultural ethnobotanical studies in north east India **Ethnobotay** 4, 25-28.

Phillips, J.D. (1992) Medicinal plants **Biologist** 39(5), 187-161.

Ragunathan, K (Ed) (1976) **Tribal Pockets of Nilgiris: Recording of the study of medicinal flora du health practices**. Central council for research in Indigenous medicine and homoeopathy, Hyderabad.

Rajan S. and sethuraman, M. (1991) Plants Used in the folk medicine by the kotas of Nilgiri district, Tamil Nadu **J. Ancient sci Life** 10 (4), 223-230.

Rajan S. (1992) Medicinal plants of Ootacamund, tamil Nadu. **J Econ Tax Bot Addit. Series** 10,429-460.

Rajan S. and sethuraman, M. (1993) A today plant **mahonia leschenuaitii**. **J. Ancient Sci Lie** 12 *1&2), 242-243.

Rajan, S. and Sethuraman, M. (1993) In-digenous folk practices Among Nilgiri Irulas. International J. **Indigenous knowledge and development monitor (Netherland)** 1(3), 19-20.