

Plant Genetic Resources and Knowledge of Traditional Medicine in Tamil Nadu

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ABSTRACT: *The indigenous medical practices and the herbal system have an important role in the development of modern medicines. The medicinal plants used in this system are locally available, relatively cheap and also safe and effective. This bioresources can be harnessed for the pharmacological investigation in the modern system of medicine.*

INTRODUCTION

The Indian region is well known for its native wealth of ethobotanical importance (Arora, 1985). There is a growing interest on the importance of medicinal plants and traditional health practices in solving health care problems. Rana & Chandel (1992) have estimated that the herbal medicine component possess some 1200 plant species of therapeutic value used in the traditional medicine b native population and constitute an important resource with tremendous future prospects. At present, the traditional knowledge which can be used for medicinal and other beneficial purposes is disappearing at an even faster rate tan the disappearing pf plat species every day throughout the world. The traditional medical practices, although threatened b the modern pharmacopoeia, remain alive, especially among the elderly population, the inventorying and documenting the various plants which are used to treat common diseases among each tribes at the regional and national level is necessary. It will be helpful in tracing of new and underutilised plants as source of medicine and also help to identify the habitats tat must be put under strict regulation to foster conservation.

The State of Tamil Nadu (8°5¹-N: 76°15¹-80°20¹E) harbours a very rich biological diversity and ancient ethnic history. The tribal population of this state are Irular, kadar, kanikaran, kattunayakan, kurumbar, malayali, madhuvan, palliyan, paniyan, sholigas, Thodar and others, the belong to the early groups mainly inhabit the western Ghats, neither isolated not independent, their economic pursuits being governed by the reciprocal relationship with their neighbors (Nair & Henry, 1983). They have accumulated extensive ethnomedical knowledge by their long association with the diverse plants, this knowledge is an intergral of their culture and more deeply roots in its environments.

The ethnobotanical studies were carried out tin the unexplored tribal pockets in coimbatore, Madurai, Nilgiris and Tirunelveli hills of southern western Ghats and considerable information as been gathered and documented. The tribes inhabited in these regions are the sole custodian of the wild plant resources and replay on the use of wild plants when they are ill or to keep/enhance their health. All tribes generally recognize the medicinal

value of the plants and aware of the techniques and methods of preparation. There are also a few persons who specialize in treating only a particular diseases. Besides being readily available and inexpensive to collect, severe financial constraints, lack of medicinal facilities and increase in the cost of medicine, still to a great extent the adhere to their native medicines largely using various plants and other ingredients.

METHODOLOGY

The data presented there are the out come of a series of intensive and extensive exploration trips over a period of two years. Every attempt was made to locate these plants and voucher specimens were collected. Besides, data on the local names have been collected which vary from place to place and tribe to tribe. All the specimens collected were identified on MH (Madras Herbarium) of southern circle, botanical survey of India, Coimbatore.

EMUMERATION

In the enumeration the botanical name of the genus and the species are arranged alphabetically followed by the family name in capital letters. The tribes who use them and finally information on local uses. This information as been gathered from the traditional healers, village heads, particularly for most ancient and knowledgeable inhabitants and these were cross-checked and critically analysed and documented.

1. *Actinopterys radiata* (S.W.) Link -
PITERIDACEAE
“MAYIL KAAL PACHCHILAI”-Palliyar
Rhizome suberect, subglobose, 1-2 cm, thick
densely covered by scales. The scales ground
with a piece of turmeric and boiled in castor

oil (*Ricinus communis*) and tat oil applied to
bone fracture by palliyar.

2. *Anaphyllum wightii* Schoot – ARACEAE
“KAARIKILANGU” – Kanikaran
a tall slender herb in evergreen forests. The
root made into paste applied for snakebite by
kanikaran.

3. *Andrographis serphyllifolia* (Vahl) Wight
–ACANTHACEAE
a densely hispid prostrate herb. The leaf
paste applied for snakebite by kanikaran.

4. *Anisochilus dysophylloides* Bent –
LAMIACEAE
“CHALINDI VERU CHEDI” – Irular a
stout undershrub in hill regions. The root
paste applied on chronic blisters irular.

5. *Artemisia nilagirica* (Clarke) Pamp-
ASTERACEAE
“PACHCHA POOVU” palliyar a
profusely branched, aromatic bush shrub.
The leaf extract orally administered for
diarrhoea by palliyar.

6. *Begonia malabarica* Lam. –
BEGONIACEAE
“PAARAIVAATTI” –Palliyar
Subshrubby, common in moist forests. The
leaf paste applied all over the body for fever
by palliyar.

7. *Brugmansia suaveolens* (Willd.) Bercht &
Presl SOLANACEAE
“MALAIOMATHAI” palliyar
An evergreen leafy shrub. Dried fruits of
capsicum annum rolled in a white cloth
smeared with neem oil, kept inside the
corolla tube of this flower and smoked for
migraine by palliyar.

8. *Canscora diffusa* (Vahl) R.Br. ex Roem &
Schult. – GENTIANACEAE

“ARIVAA VETTU PACHCHILAI”-
Palliyan

Gregarious erect, profusely branched herb. Leaves ground with a pinch of calcium and the paste applied on cuts for 4 time in 4 days b palliyan.

9. *Colocasia esculenta* (L) schott-
ARACEAE

“SAMBANGIKEERAI” Palliyan

Perennial thberous herb. Boiled leaves and petiole mixed with cooked rice and eaten for kidney stones b palliyan.

10. *Galactia longifolia* benth – FABACEAE
“KAAYAPACHCHILAI”- Palliyan

A slender climber. Laves ground with calcium and the pate applied on cuts by palliyan.

11. *Lantana indica* Roxb- VERBENACEAE

“VELLA PARALAI” Irular

An erect unarmed shrub in hilly regions. Leaf juice administered orally once in the morning to cure fits in children b irular.

12. *Impatiens balsamina* L. –
BALSAMINAEAE

“PODDHAPACHAI”-Palliyan

Succulent herb leafy twig ground with onion and the paste applied on boils b palliyan.

13. *Pachygone ovata* (Poir) Hook F. &
Thoms – MENISPERMACEAE

“ALVASKODI”-Kanikaran

Branched straggler. Leaf paste applied on head and taken bat to reduce body heat b kanikaran

14. *Pandanus thwaitesii* martelli-
PANDANACEAE

“KAITHA” – Kanikaran

A small under shrub in evergreen forests, Tender apical meristem eaten twice a day for 3 days for jaundice by kanikaran.

15. *peperomia tetraphylla* (forst. F.) Hook &
Arm – PIPERACEAE

“ALIGULCHEDI” Irular

An epiphytic herb leaf juice applied for mouth sores and nasal blisters by irular.

16. *Plectranthus urticifolis* Hook F.-
LAMIACEAE

“PADAPPANTHALAI” –Palliyan

A succulent herbs in hill areas. Leaf extract orally administered by palliyan for boils and blisters.

17. *Pyrosia porosa* Hovenkamp-
POLYPODIACEAE

“PAARAIPACHAI” – Palliyan

Rhizome stout, creeping upto 5 mm, thick, densely covered by scales. The scales ground with arecanut and onion, applied externally for rheumatism by palliyan.

18. *Sansevieria roxburghiana* schults &
schultes F. – AGAVACEAE

“PAAMBUPIRAI” Kanikaran

A stout fleshy herb. Tubes eaten raw to recover from snake bite by kanikaran. Leaf paste applied on boils and blisters by kanikaran.

19. *Sonerila tinneveliis* fischer-
MELASTOMATAACEAE **“KALPULI”** –
Kanikaran

An erect undershrub in the ill. Leaf extract orally administered to cure body swelling by kanikaran.

20 *Scleria levis* Ret. – CYPERACEAE

A tufted perennial. Roots paste diluted in 100 ml of cow's milk, orally administered 3 to 4 times for dysentery by kadars.

21. *Spermacoce ocymoides* Burm.F.-
RUBIACEAE
"SIRUMULLAI" – Palliyan

Sparsely pubescent, erect herb in hilly regions, leaf paste applied and taken hot water wash for insect sting by palliyan.

22. *Vernonia albicans* DC. –
ASTERACEAE
"SIRU SANGA CHEDI" – Palliyan

A white tomentos undershrub in open forests in hills. Leaves ground with a pinch of calcium and the paste applied on burns by palliyan.

23.V. *anthelminticum* (L) Wild –
ASTERACEAE
"KATTU SEERAGAM" – Irular

A large erect annual. Leaf powder used for snakebite by irular.

24. *Nephrolepis auriculata* (L) TRIMEN-
NEPHROLEPIDACEAE
"MOOTHIRA KILANGU" – Palliyan
Rhizome erect, about 2 cm thick fresh rhizome eaten as diuretic by palliyan.

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