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Ethnomedicinal Importance of Pteridophytes used by Chenchus of Nallamalais, Andhra Pradesh, India

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Abstract

The present study focuses specifically on the ethnomedicinal importance of 15 species of Pteridophytes, used by Chenchu tribes occurring in Nallamalais of Andhra Pradesh, India. The botanical name, family name, vernacular name, habit, habitat and their ethnomedicinal uses are provided.

Key words: Pteridophytes, Chenchus, Nallamalais, Andhra Pradesh.

Introduction

Nallamalais are range of parallel hills of the Eastern Ghats, located south of the Krishna river in southern part of Andhra Pradesh state, India. They are renowned for being rich in biodiversity and their total length is about 430 kms; the northern boundary is in the Palnad Basin, and the southern boundary is in the Seshachalam Hills (Rao. 1998). The Chenchus are a Telugu speaking (originally chenchu language of Dravidian style) food-gathering tribe, living in the Nallamala forests, spread over the districts of Mahabubnagar, Kurnool, Prakasam, Nalgonda and Guntur. They are a conservative tribal group and have not made many changes in their lifestyle or tried to adapt to modernity. They live in the enclosed space and geography, leading a life of an unbroken continuity. The Chenchus are undaunted by their natural surroundings and set out to gather food or hunt animals. The bow and arrow and a small knife is all the Chenchus possess to hunt and live. They hunt wild animals like boar and deer, but with the increasing interest in wild life conservation, they are content to hunt small animals like lizards, rabbits and wild birds. Their meal is fairly simple and usually consists of gruel made from jowar or maize, and boiled or cooked forest tubers. They mix tamarind fruit with tamarind ash and eat. This is especially good for pregnant women. The Chenchus collect forest products like roots, fruits, tubers, beedi leaf, mohua flower, honey, gum, tamarind and green leaves and make a meagre income of it by selling these to traders and government co-operatives. The Chenchus refuse to be displaced from the forest and continue to live in harmony with the tigers in the forests. A Chenchu village is known as “Penta”. Each penta consists of few huts that are spaced apart and are grouped together based on kinship pattern (Sathya Mohan, 2004).

The Nallamalais hosts primarily tropical southern dry mixed deciduous and southern moist mixed deciduous forests (Champion & Seth, 1968). Pteridophytes (Ferns and Fern allies) are first vascular plants and unique group in Plant Kingdom and preferably found in moist vegetated areas.

Methodology

The present data is outcome of field research carried out as part of floristic and ethnobotanical studies during 1999 to 2004. Ethnomedicinal data was collected from elderly Chenchu tribal people, who practice herbal medicine. Specimens were collected for reference.

Enumeration

During ethno-botanical survey of the Nallamalais area, it was found that 15 species of Pteridophytes (Ferns) medicinally important and used by chenchu tribes.

Information regarding botanical name followed by family name (in parenthesis), vernacular name, habit, habitat and their ethnomedicinal uses are provided, which includes 15 species (under 10 families) of Pteridophytes used in ethnic herbal practices. Taxa are arranged alphabetically.

1. *Actiniopteris radiata* (Sw.) Link (Actiniopteridaceae)

N.V. Nemali Adugu.

Habit: Erect herbs, about 10 cm high.

Habitat: Plants of dry localities, rather stiff ferns resembling a miniature fan palm.

Uses: Plants are soaked overnight in a glass of water and taken orally in morning for control of blood pressure and tuberculosis. Plants are dried and one teaspoonful powder is taken orally, once a day for four days in the case of cough.

2. *Adiantum caudatum* L. (Adiantaceae)

N.V. Rajahamsa.

Habit: Erect or slightly decumbent herbs, about 12 cm high.

Habitat: Confined to tropical moist deciduous forests.

Uses: Leaf paste is applied for burns, cuts and wounds. It is also used as an expectorant.

3. *Adiantum lunulatum* L. (Adiantaceae)

N.V. Chitrapada.

Habit: Erect or slightly decumbent herbs, about 15 cm high.

Habitat: Confined to tropical moist deciduous forests.

Uses: The plant is useful in dysentery, leprosy and fever. The paste of fronds and rhizomes is applied for centipede-bite.

4. *Ceratopteris thalictroides* (L.) Brongn. (Parkeriaceae)

N.V. Anneetha.

Habit: Large, marshy herbs, to 1 m.

Uses: Leaf powder along with turmeric is applied to unhealed wounds.

Habitat: Occurs along fairly fast moving streams of tropical dry deciduous forests.

5. ***Cheilanthes farinosa*** (Forssk.) Kaulf. (*Cheilantheaceae*)

N.V. Neelu.

Habit: Erect herbs, about 8 cm high. Fronds white beneath.

Habitat: Confined to tropical moist deciduous forests.

Uses: The paste of fronds and rhizomes along with *turmeric* is applied for skin diseases.

6. ***Cyclosorus gongilodea*** (Schkuhr.) Link (Thelypteridaceae)

N.V. Jayaku.

Habit: Erect herbs to 75 cm.

Habitat: Rare in damp places in tropical dry and moist deciduous forests.

Uses: Leaf paste is applied for itching, scabies.

7. ***Cyclosorus parasiticus*** (L.) Farw. (Thelypteridaceae)

N.V. Maya.

Habit: Erect herbs to 60 cm high.

Habitat: Rare, along streams in tropical moist deciduous forests.

Uses: Paste of rhizome is applied over forehead to get rid of evil spirits.

8. ***Hemionitis arifolia*** (Burm.f) Moore (Adiantaceae)

N.V. Kondajerri.

Habit: Erect herbs, about 8 cm high.

Habitat: Rare, in hilly areas of tropical dry deciduous forests.

Uses: Leaf extract is applied to centipede bite and wounds.

9. ***Lygodium flexuosum*** (L.) Sw. (Schizaeaceae)

N.V. Mekasannu.

Habit: Climbing herbs.

Habitat: Often seen among bushes in tropical moist deciduous and semievergreen forests.

Uses: One teaspoonful of leaf powder is mixed in milk and given orally for children to improve memory.

10. ***Nephrolepis cordifolia*** (L.) Presl. (Nephrolepidaceae)

N.V. Raasu poda.

Habit: Erect herbs to 60 cm high.

Habitat: Occasional in moist places of tropical dry and moist deciduous forests.

Uses: Herb is used against cough and skin diseases.

11. *Pteris vittata* L. (Pteridaceae)

N.V. Malavi.

Uses: Herb juice used for diarrhea and dysentery.

Habit: Erect herbs to 60 cm high.

Habitat: Rare, in moist places of tropical semievergreen forests.

12. *Selaginella bryopteris* (L.) Baker (Selaginellaceae)

N.V. Sanjeeva.

Habit: Erect herbs to 15 cm.

Habitat: Rare, in damp places in tropical moist deciduous forests.

Uses: Whole plant is pounded and 1 teaspoon of paste is taken daily once orally with water for debility for 3 days.

13. *Selaginella indica* (Milde) Trayon (Selaginellaceae)

N.V. Pittakalu.

Habit: Creeping herbs to 10 cm.

Habitat: Occasional, on dry rocks under shade. Xerophytic fern.

Uses: Plants are burnt in home for curing children's diseases.

14. *Selaginella involvense* (Sw.) Sw. (Selaginellaceae)

N.V. Antudu chettu.

Habit: Creeping herbs to 12 cm.

Habitat: Occasional on moist, shady places of tropical semievergreen forests.

Uses: Plants were dried and powder (1 teaspoon) is given orally with milk for indigestion.

15. *Tectaria macrodonta* (Fee). C. Christensen (Aspidiaceae)

N.V. Aski.

Habit: Erect herbs to 60 cm high.

Habitat: Rare, in moist, shady localities of tropical dry deciduous forests.

Uses: 5-10 ml of whole plant decoction taken orally, for stomach-ache.

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