

## ETHNOBOTANICAL STUDIES ON THE ENDEMIC KADAR TRIBES OF ANAMALAI'S, WESTERN GHATS - INDIA

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The Kadars are one among the five Particularly Vulnerable Tribal Group (PVTG) in Kerala. They are confined to the wet-evergreen forest areas of Parmbikulam, Vazhachal, Sholayar, Nelliampathy of Kerala state and Valparai, Mannampally areas of Tamil Nadu. The ethnobotanical knowledge of the Kadars of Vazhachal forests were documented here to demonstrate their intrinsic relationship with rainforest regions of Anamalais.

**Keywords:** Kadars, Rainforest, Anamalai, Western Ghats, Ethnobotany, PVTG.

The Western Ghats, one of the two biodiversity 'Hot spots' of the Indian subcontinent is home to number of ethnic communities. There are 36 Scheduled Tribes in Kerala of which five are Primitive Tribal Groups. They are 1. Koraga, 2. Cholanaickan, 3. Kattunaickan, 4. Kadar and 5. Kurumbar. The Kadars are endemic to the 'Anamalai' part of southern Western Ghats. They are distributed in the wet-evergreen forest areas of Parmbikulam, Vazhachal, Sholayar, Nelliampathy of Kerala state and Valparai, Mannampally areas of Tamil Nadu. They are ancient forest dwellers and small scale hunters of the wet evergreen forests of the Anamalai's (Thurston, 1909). They depend on forest related jobs, Non Timber Forest Produce and fishing for their livelihood. Among the five primitive tribes of Kerala Kattunaickan and Kadar live in interior forests (Kakkoth, 2005).

The Kadar's were completely isolated from the mainstream population until the last century (Thurston 1909). Their dependence on the forest resources and cultural instincts have kept this isolation until recent time (Mahendrakumar 2005) and at the same time degradation of the forests and resources of their habitat and subsequent legal restrictions to resource utilization must have restricted their natural development. Unlike other tribes, being non-agricultural oriented and their intrinsic relationship with wet evergreen forests they have deep knowledge in diverse plant resources. Their Ethnobotanical knowledge has been poorly understood or documented.

### Materials and Methods

Literatures were found very less on their distribution, culture and resource dependence and utilization. Available literatures were collected from various reports and journals. Based on available data and Bachan (pers. comm.) their distribution with their original (wet evergreen forest) habitat is now exist only in the Vazhachal-Sholayar-

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Malakkpara forests of the Vazhachal Forest Division of central Kerala. The study was focused on four tribal settlements of the Vazhachal Forest Division. i.e. 1. Vazhachal, 2. Pokalapara, 3. Sholayar Power house and 4. Malakkpara settlements. The tribesmen from each settlement were interviewed personally and in group gatherings and 25 key informers were selected for the study. Semi-structured interviews were done to find out their ethno botanical knowledge. The listed plants were collected on field preserved and identified for scientific purpose using various floras and also with the help of experts. Their perceptions on resource utilization, traditional knowledge etc were gathered during group gatherings and Participatory Research Methods like historical time line, community ranking etc have been done. The identified plants were categorized into various groups such as medicinal plants, NTFP's, food yielding etc.

#### Results and Conclusions

According to this study 90 species of plants have been used by the Kadar tribe for 120 different purposes. Of which 44 were medicinal, 26 food yielding, 27 NTFP and others were timber, fire wood,

spices and beverages. Habitat wise distribution of the species showed 72% dependence on the Evergreen forest habitat and rest 18 % were common plants. Among the plants of the evergreen forests 59% from wet evergreen forests, 18% from semi evergreen forests, 12 % from secondary moist deciduous forests and 11 % from low elevation riparian forests.

Of the 90 species of plants 22 were of endemic category i.e. Southern Western Ghats Endemic 10, Western Ghats Endemic 8, South West India Endemic 2 and Peninsular India Endemic 2.

Unlike other tribes of Kerala, the Kadar doesn't have commercial use of medicinal plants. Their economy depend most on other NTFP produces like Honey, Black Dammar, White Dammar, Shikkai, Kasthurimanjal and Wild Nutmeg. Table 1. provides the list of medicinal plants used by Kadar and their usage. Depletion of the forest resources, loss of traditional practices and subsequent loss of transfer of traditional knowledge to the succeeding generation signifies the importance of detailed documentation of their ethno-botanical knowledge.

Table. 1. Medicinal plants used by Kaders

Sl. NO	Name of the plant	Local name	Useful parts	Uses
1	<i>Baccaurea courtallensis</i>	Mootilpazham	Fruits	Against cold
2	<i>Blechnum</i>	'Keera'	Rhizome	Knee pain
3	<i>Cassia fistula</i>	Kanikonna	Bark	Against toothache
4	<i>Centella asiatica</i>	Kudakan	Whole plant	For urinary diseases and wound healing
5	<i>Coscinium fenestratum</i>	Maramanjal	Tuber	Used for stomach pain
6	<i>Curcuma aromatica</i>	Kasthurimanjal	Rhizome	Used as ingredient
7	<i>Curcuma longa</i>	Manjal	Rhizome	Against stomach pain
8	<i>Curcuma neilgherrensis</i>	Kuva	Rhizome	Medicinal ingredient
9	<i>Curcuma zedoaria</i>	Manjakuva	Rhizome	Medicinal ingredient
10	<i>Cyclea peltata</i>	Padakizhangu	Tuber	Used for stomach pain
11	<i>Emilia sonchifolia</i>	Muyalcheviyan	Leaves	Used for cold & stomach pain
12	<i>Entada rheedii</i>	Kakkumkai	Seeds	Against body & stomach pain
13	<i>Garcinia gummi-gutta</i>	Kudapuli	Fruits	Medicinal
14	<i>Grewia tiliifolia</i>	Chadachi	Leaves	Used as antidandruff
15	<i>Harpullia arborea</i>	Puzhukolli	Whole plant	Against leech biting

16	<i>Helicteris isora</i>	Edampiri-valampiri	Leaves	Against insect biting
17	<i>Justicia gendarussa</i>	Odichukuthi	Leaves	Against body pain
18	<i>Leucas aspera</i>	Thumba	Whole plant	Against itching
19	<i>Mallotus philippensis</i>	Sindhuramaram	Leaves	Used for wound healing
20	<i>Mikania micrantha</i>	Mikini	Leaves	Used against wound healing
21	<i>Mimosa pudica</i>	Thottavadi	Leaves	Against hurt
22	<i>Myxopyrum smilacifolium</i>	Chathuramulla	Tuber	Used for blood purification
23	<i>Naravelia zeylanica</i>	Vathamkodi	Leaves	Used for toothache
24	<i>Ocimum americanum</i>	Kattuthulasi	Leaves	Against fever & cough
25	<i>Ocimum tenuiflorum</i>	Thulasi	Leaves	Used against cough
26	<i>Phyllanthus amarus</i>	Keezharnelli	Rhizome	Urinary infection & Jaundice
27	<i>Phyllanthus emblica</i>	Nelli	Fruits	Medicinal ingredient
28	<i>Piper barberi</i>	Kattu Kurumulaku	Seeds	Medicinal ingredient
29	<i>Piper longum</i>	Thippali	Roots	Against toothache
30	<i>Piper nigrum</i>	Kurumulaku	Seeds	Ingredient of tonic
31	<i>Pittosporum neelgherrense</i>	Analivega	Leaves	Used against Snake venom
32	<i>Psidium guajava</i>	Peramaram	Bark	Against toothache
33	<i>Pterocarpus marsupium</i>	Venga	Leaves	Against body pain
34	<i>Rauvolfia serpentina</i>	Sarpagandhi	Roots	Against headache
35	<i>Rotula aquatica</i>	Kallurvanchi	Whole plant	Used for drinking purpose & is also used for the treatment of asthma & kidney stone
36	<i>Sida acuta</i>	Kurunthotti	Whole plant	Against body pain & headache
37	<i>Sida rhombifolia</i>	Kurunthotti	Whole plant	Against body pain & headache
38	<i>Strobilanthus heyneanus</i>	Karimkuriinji	Leaves	For stomach pain
39	<i>Terminalia paniculata</i>	Maruthu	Leaves	Used for chest pain
40	<i>Vernonia cinerea</i>	Puvankurunal	Whole plant	wound healing
41	<i>Wrightia tinctoria</i>	Dhanthapala	Leaves	Against toothache
42	<i>Zingiber officinale</i>	Inchi	Rhizome	Stomach pain
43	<i>Zingiber zerumbet</i>	Kattinchi	Rhizome	Medicinal ingredient
44	<i>Zornia gibbosa</i>	Murikutti	Leaves	Against stomach pain

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