



# ETHNOECOLOGY OF KADAR AND MALASAR ETHNIC COMMUNITY ENDEMIC TO ANAMALAIS OF WESTERN GHATS

*The Thesis Submitted to the University of Calicut  
in partial fulfilment for the requirements for the award of the degree of*

**DOCTOR OF PHILOSOPHY  
IN  
BOTANY**

by

**GOUTHAMI. V**

*Under the supervision of*

**Dr. Amitha Bachan K.H**



**RESEARCH & PG DEPARTMENT OF BOTANY  
MES ASMABI COLLEGE, KODUNGALLUR, KERALA  
AFFILIATED TO UNIVERSITY OF CALICUT  
APRIL 2022**



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# MES ASMABI COLLEGE

Reaccredited by NAAC with B++ Grade, Affiliated to University of Calicut


## CERTIFICATE

This is to certify that the thesis entitled studies on "ETHNOECOLOGY OF KADAR AND MALASAR ETHNIC COMMUNITY ENDEMIC TO ANAMALAIS OF WESTERN GHATS" submitted to the University of Calicut by Mrs. Gouthami V. in partial fulfillment of the award of the degree of Doctor of Philosophy in Botany is a bonafide record of the doctoral research work carried out by her under the supervision and guidance of Dr. Amitha Bachan K.H., Assistant Professor and Research Guide, Research Department of Botany of our institutions affiliated to University of Calicut. No part of the present work as formed the basis for the award of any other degree or diploma previously.

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## **DECLARATION**

I Gouthami V., do hereby declare that the doctoral research work presented in this thesis entitled “ETHNOECOLOGY OF KADAR AND MALASAR ETHNIC COMMUNITY ENDEMIC TO ANAMALAIS OF WESTERN GHATS” submitted by me in partial fulfilment for the Ph. D. degree in Botany of the University of Calicut under the supervision of Dr. Amitha Bachan K.H., Assistant professor in Research Department of Botany, MES Asmabi College, P. Vemballur incorporates the results of the work done by me. I have not submitted this thesis to any other University for the award of any other degree, diploma, or under any other title and it represents the original work done by me.

P. Vemballur

28/04/2022

Gouthami V.

## ABSTRACT

The ecological aspect of indigenous knowledge including ecological processes and the relationship between humans, animals, plants, and physical elements of the local environment is called Ethnoecology. The ethnoecological knowledge of the indigenous community of the Western Ghats biodiversity hotspot is seldom explored and documented. This doctoral thesis explored the ethnoecological knowledge associated with the terrain, climate, biota, ecosystems, and ecological relationships of the *Kadar* and *Malasar* ethnic communities. *Kadar* are PVTG endemic to the rainfed areas of the Anamalai part of Western Ghats and the *Malasar* in the north-eastern dry zones of the same landscape. The study documented 443 plant taxa and 302 fauna, 32 different terrain features from *Kadar* and 191 plant taxa and 170 fauna, and 11 terrain features from *Malasar* indigenous community. Both communities have knowledge of climate and different ecological relationships and this could be first comprehensive ethnoecological research from the region. The ethnoecological knowledge provides great scope in biodiversity conservation, ecological theories, and process.



## സംഗ്രഹം

തദ്ദേശീയമായ പരിസ്ഥിതിയുടെ ഭൗതിക ഘടകങ്ങളും മനുഷ്യരും മൃഗങ്ങളും സസ്യങ്ങളും തമ്മിലുള്ള ബന്ധവും ഉൾക്കൊള്ളുന്ന തദ്ദേശീയ വിജ്ഞാനത്തെ ആവാസവ്യവസ്ഥാ വിജ്ഞാനം എന്നു പറയുന്നു. തദ്ദേശീയ ഗോത്രസമൂഹങ്ങളുടെ ഇത്തരത്തിലുള്ള ജ്ഞാനത്തെ ഗോത്ര ആവാസവ്യവസ്ഥാ വിജ്ഞാനമെന്ന് വിളിക്കാം. പശ്ചിമഘട്ടത്തിലെ ഗോത്രസമൂഹങ്ങളായ കാടർ വിഭാഗത്തിന്റെയും മലസർ സമൂഹത്തിന്റെയും ആവാസവ്യവസ്ഥാ പരിജ്ഞാനമാണ് ഈ പ്രബന്ധത്തിൽ പറയുന്നത്. കാടർ മഴക്കാടുകളിലെ പുരാതന വനവാസികളും അർദ്ധനാടോടികളുമാണ്. മലസർ ഗോത്രസമൂഹം വരണ്ട വനപ്രദേശങ്ങളിലും മലകളുടെ താഴ്വാരങ്ങളിലുമാണ് കണ്ടുവരുന്നത്. ഈ രണ്ട് ഗോത്രസമൂഹങ്ങളുടെയും ആവാസവ്യവസ്ഥാ പരിജ്ഞാനം അവർ നിലകൊള്ളുന്ന ഭൂപ്രകൃതിക്കനുസരിച്ച് വ്യത്യാസപ്പെട്ടിരിക്കുന്നു. ഈ പഠനത്തിൽ കാടർ വംശത്തിനറിയുന്ന 443 സസ്യങ്ങളേയും 302 ജന്തുജാലങ്ങളേയും മലസർ സമൂഹത്തിനറിയുന്ന 191 സസ്യങ്ങളേയും 170 ജന്തുജാലങ്ങളേയും രേഖപ്പെടുത്തിയിരിക്കുന്നു. അതിൽ സസ്യജന്തുജാലങ്ങളുടെ പേരുകളിൽ അവരുടെ തനത് നാമങ്ങളും കണ്ടെത്തി. കാടർ സമൂഹം പ്രകൃതിയുമായുള്ള നിരന്തരമായ സമ്പർക്കത്തിന്റെ ഭാഗമായി അവരുടെ ആവാസവ്യവസ്ഥയിലുള്ള സസ്യജന്തുജാലങ്ങളെ വർഗ്ഗീകരിക്കുകയും അതിൽ 351 ൽപരം സസ്യജന്തുജാലങ്ങളെ കുറിച്ചുള്ള ആവാസവ്യവസ്ഥാ പരിജ്ഞാനം രേഖപ്പെടുത്തി. മലസർ വിഭാഗത്തിൽ നിന്നും 186 ൽ പരം സസ്യജന്തുജാലങ്ങളെ കുറിച്ചുള്ള ആവാസവ്യവസ്ഥാ പരിജ്ഞാനം രേഖപ്പെടുത്തുകയും ചെയ്തു. കൂടാതെ ഈ രണ്ടു ഗോത്രസമൂഹങ്ങളിൽ നിന്നും വിവിധ ഭൂപ്രകൃതി വിഭാഗങ്ങളേയും വിവിധ വനങ്ങളേയും കാലാവസ്ഥയെയും കുറിച്ചുള്ള അറിവുകളും, ആവാസവ്യവസ്ഥയുടെ വികസനത്തെ കുറിച്ചുള്ള അറിവുകളും ഈ പ്രബന്ധത്തിൽ രേഖപ്പെടുത്തിയിരിക്കുന്നു. പശ്ചിമഘട്ടമേഖലയുടെ ഗോത്ര-ആവാസവ്യവസ്ഥാ വിജ്ഞാനം സമഗ്രമായി രേഖപ്പെടുത്തിയ പ്രഥമപഠനമായി ഇതിനെ കാണാം.

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## ***Chapter 1***

# GENERAL INTRODUCTION

## 1.1 RATIONALE

The ecological aspect of indigenous Knowledge including ecological processes and the relationship between humans, animals, plants, and physical elements of the local environment is called Ethnoecology. Casagrande (2017) defines Ethnoecology as the cross-cultural study of how people perceive and manipulate their environments. Research on ethnoecology provides an in-depth understanding of the dynamic relations between the indigenous community and the biodiversity around and also with the socio-cultural system. Each indigenous community has their own amazing cultural history interwoven with the natural habitat, ecosystem and species within. These have been preserved as traditional knowledge systems acquired through hundreds of years of experience and usually passed on through generations as oral history.

Studies on traditional knowledge are well-established across the globe. The international Council of Science (ICSU, 2002) defines Traditional Knowledge (TK) as “*a cumulative body of knowledge, know-how, practices and representations maintained and developed by peoples with extended histories of interaction with the natural environment. These sophisticated sets of understandings, interpretations and meanings are part and parcel of a cultural complex that encompasses language, naming and classification systems, resource use practices, ritual, spirituality and worldview*”. Social scientists generally perceive this as socially constructed knowledge in interaction with the community within and outside and also with the environment. The Indigenous Traditional Knowledge (ITK) within the indigenous communities has a close relationship with the natural environment, ecosystems, habitat and biodiversity. These have been perceived as scientifically validated technique and knowledge (Sharma, 2021). The World Intellectual Property Organization



(WIPO) also provides definitions and international legal protections for TK and Traditional Cultural Expressions (TCE) through the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge, and Folklore (IGC). The UN Declaration on the Rights of Indigenous Peoples (UNDRIP) defines and provides mandatory background information and legal protection for ITK. The Convention on Biological Diversity (CBD) also recognises the role of TK and traditional language expressions in protection of biodiversity, ecosystems and landscapes. The World Trade Organization Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs) has set rules to protect Intellectual Property Rights (IPR) binding to CBD and this has been reflected in the Biological Diversity Act (2002) of India. Special provisions for claiming IPR for indigenous people are there in the Forest Right Act (2006). The Government of India has set up a digital library system for Traditional Knowledge.

The ethnic knowledge is socially constructed through accumulation and interaction of knowledge generation after generation based on their worldview and which is chiefly determined by the natural environment (Bachan *et al.*, 2014). Most of these are recorded as knowledge pertained to names of plants and animals (Ethnobotany, Ethnozoology), medicinal uses practices (Ethno medicine) and ethnic knowledge related with cultural practices (Ethnic Cultural Expressions, TCE). Their interrelationships are poorly narrated or recorded across the globe and are known as Traditional Ecological Knowledge (TEK) or Ethnoecological knowledge. Ethnoecology is a science derived from Ethnobiology. The doctoral thesis ‘The Relation of the *Hanunoo* Culture to the Plant World’ of Conklin, (1954) coined the term Ethnoecology. He contributed to Ethnoecological studies in Southeast Asia and it has gained momentum very recently. Martin (2001) provided its definition and explained the works are limited to Ethnobotany, Ethnozoology, and economic botany and require the scope of

widening both in theory and practice. Casgrande (2000-2021) provided wide range of topics with an application of Ethnoecological studies he conducted in the Mayan communities.

Ethnoecological importance of plant biodiversity in mountain ecosystem with special emphasis on indicator species of Himalayan Valley in northern Pakistan was provided by Shujaul Mulk Khan of department of Botany, Hazara University, Pakistan, (2013). Anthropological aspects of Ethnoecological studies by Anindita Ghosh ‘An Ethnoecological approach to the study of a village in Himachal Pradesh’ (2012) from the Indian Institute of Technology, Mandi, Ethnoecology of Indian *Ephedra* by Rita Singh and Pragya Sourabh (2012) of school of Environment Management, GGS Indraprastha University, Dwaraka and ethnoecological knowledge about medicinal plants in the Western Ghats, special reference to Valparai, Tamil Nadu (Jeniffer *et al.*, 2014) are the only available works on ethnoecology from the Indian region. A comprehensive ethnoecological work has not in publication yet. This thesis on the Ethnoecological knowledge of *Kadar* and *Malasar* ethnic community endemic to the Anamalai part of Western Ghats could be a pioneering comprehensive and systematic ethnoecological work from our region. The study also put forward a systematic approach for widening the scope of ethnoecological studies as suggested by Martin (2001) and Casagrande (2000-2021).

### **1.1.1 *Kadar* Ethnic Community**

*Kadar* is an ancient ethnic community endemic to Anamalai part of Western Ghats in Southern India. Deniker (1900) in the ‘Races of Man’ describes the *Kadar* as one of the primitive hill tribes in Cochin and Travancore hills. They have been classified as one among the 75 Primitive Vulnerable Tribal Groups (PVTGs) in the country and among the five in Kerala state. The salient features of the *Kadar* described by Thurston (1909) is “*short stature, dark skin, platyrrhine. They are chipping all teeth or some of the incisor teeth both upper and lower. and women wear bamboo combs in their black hair. Men and women are greatly*

*talented in making bamboo baskets, necklets*”, etc. According to Sankara Menon, as cited in Ehrenfels (1952), *Kadar* belongs to the Negroid tribal group and is nomadic in nature and they speak a mixture of Tamil and Malayalam. They possess some genetic affinity with the earliest groups of people to have migrated and settled in the Indian subcontinent. They are considered as the original inhabitants of the Anamalai hills of Western Ghats (Gouthami & Bachan, 2019). They are termed as “King of Anamalai hills” by Thurston (1909) and mention the *Kadar* as good trackers and botanists. Lawson mentions in the book, Caste and Tribes of Southern India (Thurston, 1909) that *Kadar* climbs tall trees very fast and helped him to collect flowers and fruits from thick forests.

Table 1.1 Distribution of *Kadar* ethnic community.

SL No	Name of the settlement	State	District	No. Of house holds	Population
1	Anapantham <i>Kadar</i> Village	Kerala	Trissur	58	227
2	Vazhachal <i>Kadar</i> Village	Kerala	Trissur	54	182
3	Pokalapara <i>Kadar</i> Village	Kerala	Trissur	22	71
4	Peringalkuthu <i>Kadar</i> Village	Kerala	Trissur	22	74
5	Vachumaram <i>Kadar</i> Village	Kerala	Trissur	51	141
6	Mukkumpuzha <i>Kadar</i> Village	Kerala	Trissur	10	33
7	Sholayar <i>Kadar</i> Village	Kerala	Trissur	18	42
8	Anakayam <i>Kadar</i> Village	Kerala	Trissur	23	65
9	Malakkappara <i>Kadar</i> Village	Kerala	Trissur	45	149
10	Kuriarkutty <i>Kadar</i> Village	Kerala	Palakkad	58	285
11	Parambikulam <i>Kadar</i> Village	Kerala	Palakkad	54	205
12	Parambikulam earth dam <i>Kadar</i> Village	Kerala	Palakkad	45	120
13	Thekkady 30-acre <i>Kadar</i> Village	Kerala	Palakkad	34	78
14	Cherunelly <i>Kadar</i> Village	Kerala	Palakkad	9	27
15	Kalluchadi <i>Kadar</i> Village	Kerala	Palakkad	28	77
16	Thalikalakallu	Kerala	Palakkad	55	290
17	Erumapara <i>Kadar</i> Village	Tamil Nadu	Coimbatore	26	84
18	Udubanpara <i>Kadar</i> Village	Tamil Nadu	Coimbatore	25	70

19	Kallarkudi <i>Kadar</i> Village	Kerala	Coimbatore	17	56
20	Villoni /Nedungkundru <i>Kadar</i> Village	Tamil Nadu	Coimbatore	67	216
21	Eathakuzhi <i>Kadar</i> Village	Tamil Nadu	Coimbatore	8	29
22	Kavarakkal <i>Kadar</i> Village	Tamil Nadu	Coimbatore	12	35

(Source: Gouthami and Bachan, 2019)

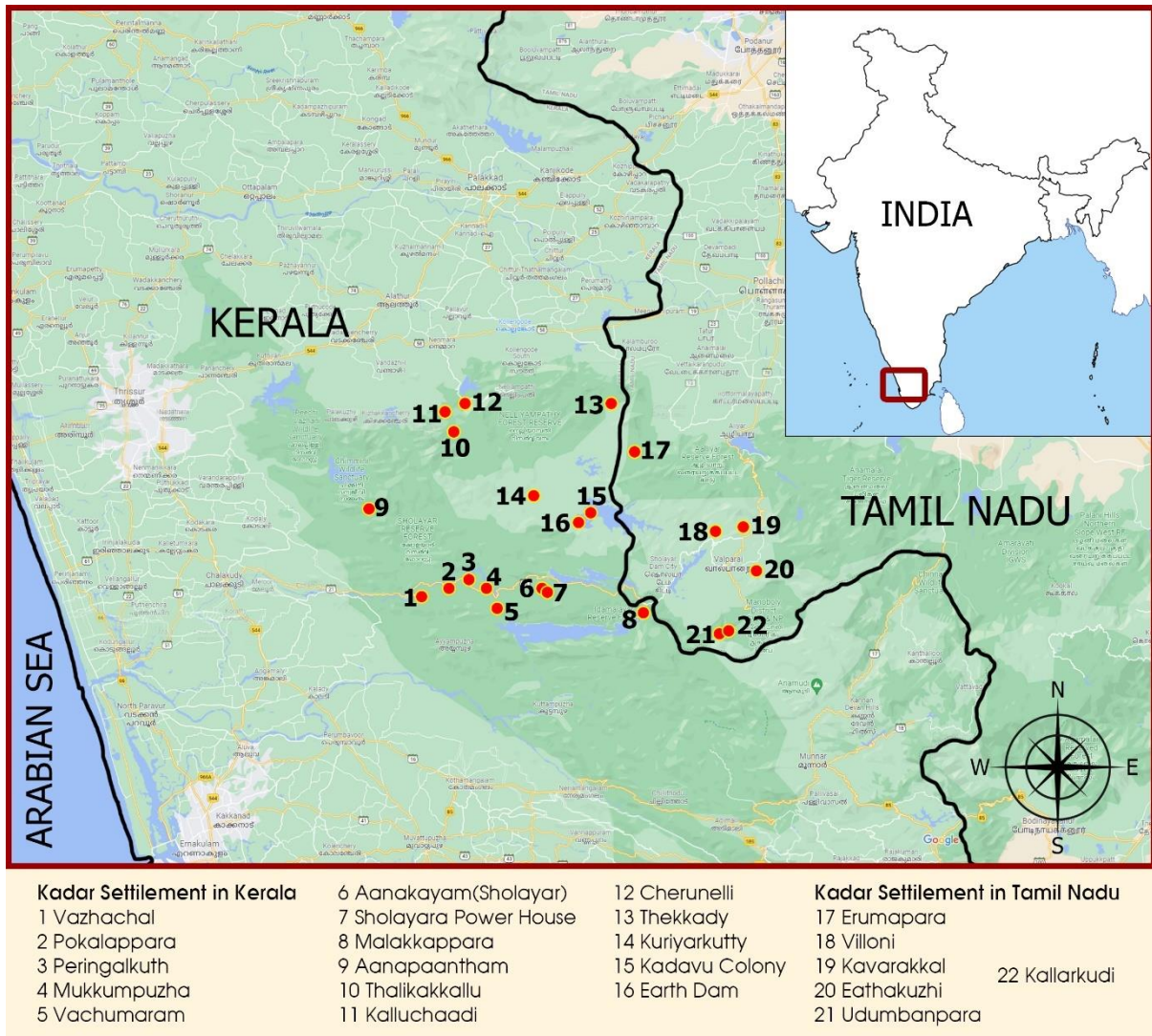


Fig. 1.1 Distribution map of *Kadar* ethnic community.

### 1.1.1.1 Socio- Cultural background

#### 1.1.1.1.1 Huts and Hamlets

*Kadar* are semi-nomadic in nature as they stay in their villages or hamlets usually and most of the time in temporary sheds, caves or on open rocks in the forests. The permanent huts are usually made of bamboo and mud and thatched with leaves of reeds. Usually are

protected with fumigation and all the huts have facilities to make fire inside. This helps to maintain the climatic conditions in the humid tropical mountain hillside. They chiefly use reed, bamboo and cane to make all the furniture, mat and utensils required for the huts. Bachan and Devika (2021) report nearly 18000 ha of forests as bamboo resource collection area of 2 hamlets of Kadars and they use 10 species of bamboo-reed resources. They follow small family sizes and the adults make separate houses especially after marriage. The hamlets or villages are small in numbers and maximum of 25-40 families traditionally. The post-independence forest settlement process limited most of the villages to settle somewhere and such villages have little higher family size but not exceed more than hundred (Table 1.1).

#### **1.1.1.1.2 Social system**

Every village has 30-50 families and has a head or the chief (*Mooppan*), who lead the village, help to resolve issues within, take decisions when necessary and communicate with other chiefs of their clans or villages. '*Thaivamaali*' is the oracle and practices traditional worship and is considered representative of God. '*Vichayaali*' knows chants and rituals. The '*Marunthaali*' is their traditional doctor who possesses knowledge about medicinal plants and their applications. The *Kadar* had seven Clans based on the origin and history of their villages and are given below

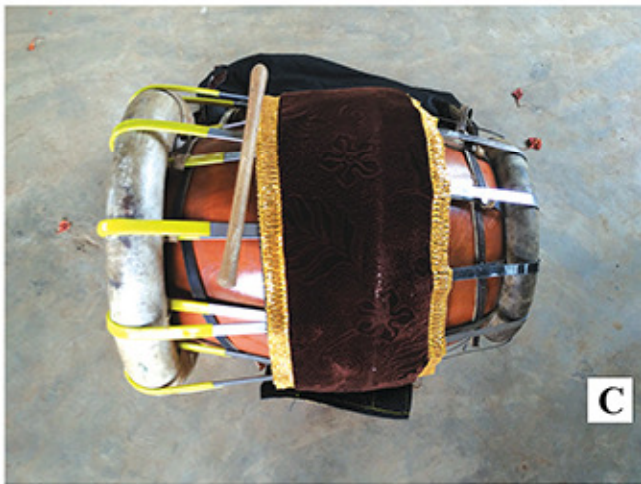
1. *Anamalayaal* (Parambikulam region)
2. *Kodakalayaal* or *Kooyaaatiyan aal* (Kuriarkutty region)
3. *Patingkarayaal* (Vazhachal and Vachumaram region)
4. *Thekkadiyaal* (Thekkady region in Parambikulam)
5. *Kottraal* from Kotur, near Pollachi (Parambikulam and Coimbatore, Pollachi region)
6. *Kalluchadiyaal* (Kalluchadi and Anapantham region)
7. *Thaliyaal* (Valparai and Udumbanpara, and Villunni)





**Fig. 1.2** *Kadar* ethnic community : A. *Kadar* man, B. *Kadar* woman, C. Udumbanpaara *Kadar* tribal settlement.



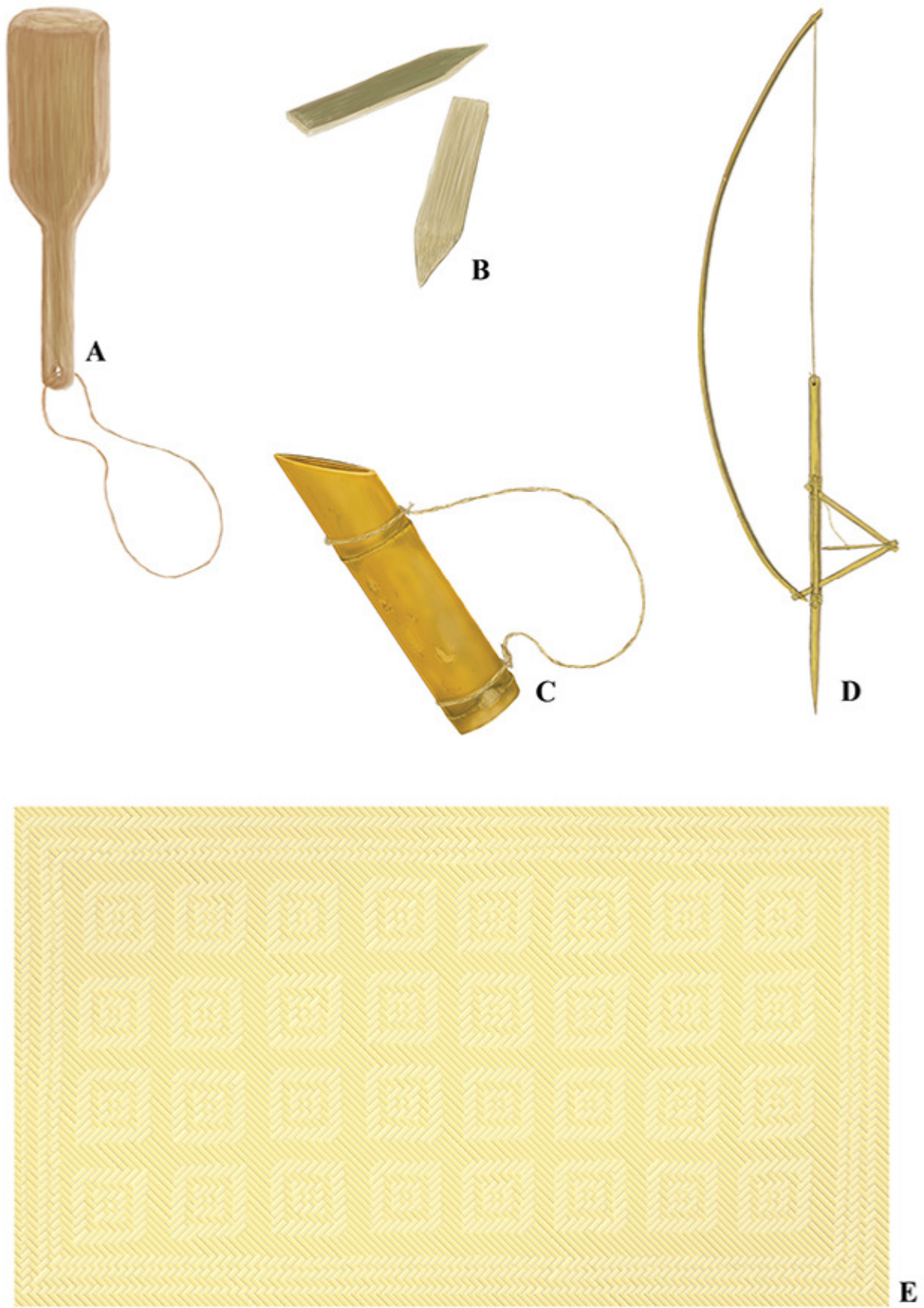


**Fig. 1.3 Kadar ethnic community :** A. Kadar's traditional hut, B. A Kadar's temple at Udumbanpaara, C. 'Thavil' (traditional drum), D. 'Chenda' (traditional drum), E. 'Karimbu' (wind instrument), F. Kadar man playing 'Karimbu', G. 'Pukari' (traditional combs used by Kadar women)



**Fig. 1.4** Tools used by *Kadar* people : A. '*Kathi*' or '*Kombukathi*' (traditional bill), B. '*Paarakol*' (digging wood stick with sharp mettal edge), C. '*Kaarakol*' (digging wood stick), D. '*Choondivil*' (traditional catapult used for hunting small animals and also used to scare away the elephants), E. '*Choonda*' (angle), F. '*Thotti*' (goad).





**Fig. 1.5** Tools used by *Kadar* people : A. '*Kottapudi*' (traditional wooden hammer), B. '*Thattan*' (stopples for using to climb on huge trees), C. '*Kumbham*' (traditional bamboo pot), D. '*Elivilu*' (traditional rodent trap), E. '*Kammaadipaaya*' (Traditional bamboo reed mat).

Full clothing among *Kadar* was started a few generations back and the chipping of teeth was a unique tradition of *Kadar*. They keep dog as a best companion both in the settlement and during the forest dwelling time.

#### **1.1.1.1.3 Livelihood practices**

Seasonally they collect Minor Forest Produces (MFP) from the forest like Honey, Black dammar, Cardamom, Wild pepper, etc. Thurston mentioned in his book (1909) about Mr Vincent's write-up on *Kadar*. According to him, *'March, April, and May are the glorious times for the Kadar to collect MFPs. They collect a huge amount of wild honey and market it. Wild honey is contributing the lion's share of their economy. The staple food is rice supplemented with roots and tubers'*. Thurston (1909) described the *Kadar* diet as containing bamboo seeds, sheep, fowls, python and fish. They make toddy from palms (*Arenga wightii* Griff. and *Caryota urens* L.). The *Kadars* always carry '*Kombukathi*' (chopping knife) and most of their livelihood activities are done with that knife. Their skill of cleaning and gutting the fish with the '*Kombukathi*' is amazing. They use different traditional tools for collecting tubers, honey and fish. They use '*Paarakol*' (digging stick) for digging the tubers and roots. They use '*Choondivillu*' (catapult) and '*Villu*' (archery) for hunting small animals and birds. The '*Kottapudi*' (Heavy duty wooden hammer) and '*Thattal*' (Peg made from bamboo) are used to fix on trees for climbing instead of a ladder to collecting wild honey.

#### **1.1.1.1.4 Birth**

There is no ceremony performed before the child's birth. The family informs the '*Moopan*' and the '*Moopan*' and '*Thaivamaali*' helps to avoid evils. The delivery is taken by an experienced old woman and her mother. Then the mother and new-born bath in hot water. The mother and baby live in a separate hut for up to two or three weeks. After that she takes medicines like ginger, pepper, mustard, asafoetida boiled with water and drinks every morning and evening. They come to the hut after the pollution period and the naming

ceremony takes place with the presence of '*Moopan*' and other important members in the settlement.

#### **1.1.1.1.5 Puberty**

The families gathering together to celebrate puberty is called '*Kalyanamirippida*'. The first menstrual period spends in a separate hut called '*Kudisal*' (seclusion house) made up of coconut leaf, bamboo, bamboo reed, and banana leaf. The mother and grandmother bathe her and give her good food and fruits. After seven days the girl's family gives a feast to the relatives. The relatives give '*Cheeru*' (gifts) to her.

#### **1.1.1.1.6 Marriage**

Polygamy in the community had been allowed. They select the bride from the community and the fiancé lives and works in the fiancée's settlement for a year. The others will notice his physical strength and skill to do the collection of wild honey, fish, and other forest products. During the wedding day, the parents of the bride and the groom will feast on the invited people. The shamiana would be decorated with reeds, bamboo etc. The men and women dance separately to the music of traditional drum and fife. The groom's mother or sister ties the '*Thali*' (Marriage badge) of yellow ribbon with a gold or silver round.

#### **1.1.1.1.7 Death**

The *Kadar* believe that the dead go to the sky or heaven. They bury the corpse in between rocks or in five feet deep dig in the grave. They play '*Karimbupattu*' during ceremonies. Eighth days after death, some death ceremonies take place in the family. In the morning on that day, the cooked rice ('*Pollichor*') will be placed in the centre of the hut and another cooked rice ('*Tullanguchor*') will be placed in the four corners of the hut. It is considered as serving this food to the spirit of the dead person. Some cooked rice will be



placed far away from the hut for all ancestors of the *Kadar* community. The family and others proclaimed his good qualities and mourned through a song.

#### **1.1.1.1.8 Worship and festivals**

The religion of *Kadars* is polytheism and worshiping stone images represents God. Attuvacheriyamma, Vanathevathi, Kali and Maladevaathikal are the Gods who worship. They conduct festivals during March and April.

#### **1.1.2 Malasar Ethnic Community**

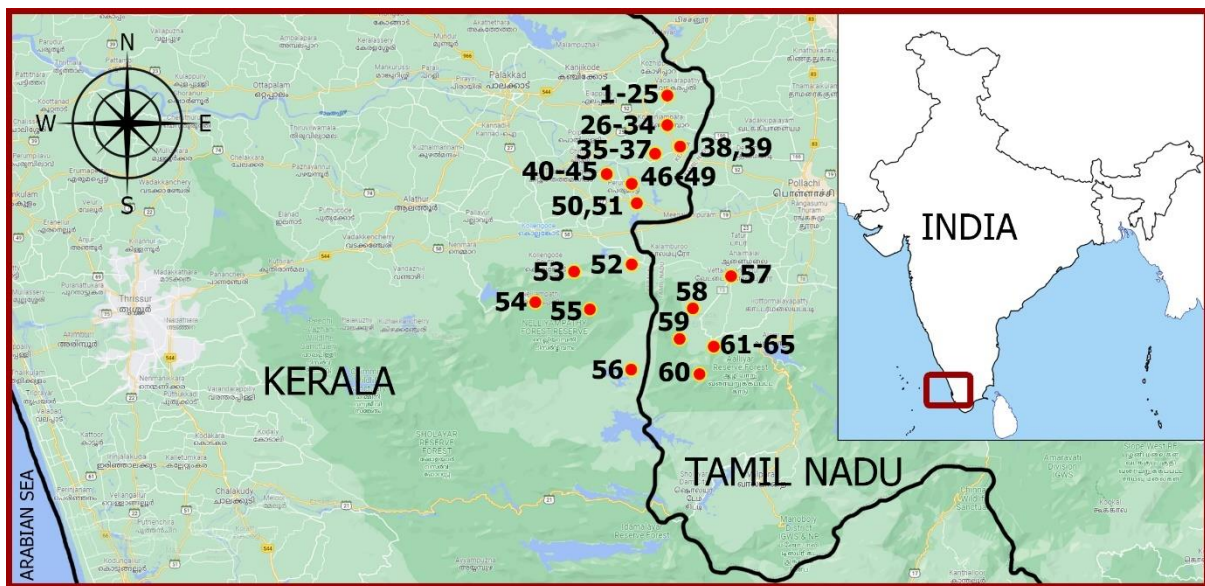
*Malasar* is one of the important tribes in the Western Ghats seen in the northern side of the Anamalais adjoining the Palakkad Gap chiefly within Parambikulam and Nelliampathy and Nenmara region. Physical characteristics of *Malasar* tribes are tall, blunt nose, and thickened lips. According to Thurston (1909), the *Malasar* are clever in game tracking and have amazing skills in making a bamboo house. They speak a mix of Malayalam and Tamil languages and have unique dialects like other aboriginal groups. The *Malasar* is also known as Malayan in the Palakkad district of Kerala. Actually, Malayan is a different ethnic community living in the Thrissur district. Mispronounced by Keralites as *Malayan* instead of *Malasar* in some areas of the Palakkad district. They are found in the Palakkad district of Kerala and Coimbatore district of Tamil Nadu. Buchanan (1807) wrote about the *Malasar*, they are found in Coimbatore and Cochin state and they are day labourers. Luiz (1962) wrote they have no evidence about their origin and early history, Thurston (1975), described that *Malasar* inhabited the land of landholders without any rent and they are the coolies on their agricultural land. They are found in Darapuram, Anamalai, Palghat areas.

Table 1.2 Distribution of *Malasar* ethnic community.

Sl. No:	Name of the Settlement	State	District	No. Of Households	Population
1	Thannaasi	Kerala	Palakkad	18	65
2	Sundharam colony	Kerala	Palakkad	4	16
3	Babaji Nagar	Kerala	Palakkad	6	25
4	Velanthaavalam	Kerala	Palakkad	5	21
5	Chunnaambukalthodu	Kerala	Palakkad	5	20
6	Polipaara	Kerala	Palakkad	22	80
7	Kaliyampaara	Kerala	Palakkad	13	54
8	Keerampaara	Kerala	Palakkad	3	11
9	Gandhi Nagar	Kerala	Palakkad	11	40
10	4 Cent Colony	Kerala	Palakkad	3	12
11	Aattayaampathy kalam	Kerala	Palakkad	17	61
12	Ayyampathy	Kerala	Palakkad	21	84
13	Mallanpathy	Kerala	Palakkad	56	218
14	Chinnakoundannur	Kerala	Palakkad	2	6
15	Parashikkal	Kerala	Palakkad	2	6
16	Kaamaraj Nagar	Kerala	Palakkad	40	156
17	Aattayaampathy New Colony	Kerala	Palakkad	31	114
18	KinarpallamPirivu	Kerala	Palakkad	28	110
19	Kinarpallam	Kerala	Palakkad	14	50
20	Nallur	Kerala	Palakkad	3	14
21	Chettiyarkulam	Kerala	Palakkad	17	67
22	Menonpaara	Kerala	Palakkad	1	3
23	Eravattappaara	Kerala	Palakkad	4	13
24	ManiyaaranChalla	Kerala	Palakkad	1	4
25	Mannampaarakkalam	Kerala	Palakkad	4	15
26	Karadipara	Kerala	Palakkad	32	122
27	Naduchalla	Kerala	Palakkad	8	31
28	Araam mile	Kerala	Palakkad	9	30
29	Kannankattupathy	Kerala	Palakkad	20	82
30	Karimankunnu	Kerala	Palakkad	9	34
31	Neelam kochi	Kerala	Palakkad	7	23
32	Moolakkada	Kerala	Palakkad	8	28
33	Manimuthu Nagar	Kerala	Palakkad	11	36
34	Manivelan	Kerala	Palakkad	8	26
35	K.K.pathy	Kerala	Palakkad	33	241
36	Kuttipallam	Kerala	Palakkad	12	45
37	Indira Nagar	Kerala	Palakkad	9	38
38	Sreevinaya colony	Kerala	Palakkad	12	53
39	Moonkilmada	Kerala	Palakkad	11	48

40	Subayya Gounder Thottam	Kerala	Palakkad	6	27
41	Dam road Valayar	Kerala	Palakkad	8	34
42	Ayyaswami Gounder Thottam	Kerala	Palakkad	12	45
43	Saravana Gounder Thottam	Kerala	Palakkad	16	55
44	K.K.Bricks Valayar	Kerala	Palakkad	8	38
45	Pulapara	Kerala	Palakkad	6	28
46	Ellakkadu	Kerala	Palakkad	55	215
47	Ramanchalla	Kerala	Palakkad	18	70
48	Jagatheesh Gounder Kaadu	Kerala	Palakkad	14	56
49	Koottukaaranpathi	Kerala	Palakkad	4	18
50	Karipaalichalla	Kerala	Palakkad	10	37
51	Kundalakulambu	Kerala	Palakkad	34	134
52	Chemmanampathy	Kerala	Palakkad	28	118
53	Kalliyampara	Kerala	Palakkad	14	67
54	Pullukaadu	Kerala	Palakkad	22	110
55	Kachithodu	Kerala	Palakkad	12	47
56	Sungam	Kerala	Palakkad	121	481
57	Vettaikaranpudur	Tamil Nadu	Coimbatore	23	120
58	Thammampathi	Tamil Nadu	Coimbatore	33	215
59	Kozhikamizhthi	Tamil Nadu	Coimbatore	11	43
60	Sarkarpathi	Tamil Nadu	Coimbatore	133	420
61	Charlapathi	Tamil Nadu	Coimbatore	108	381
62	Narikkalmanam	Tamil Nadu	Coimbatore	94	319
63	Mainarsett	Tamil Nadu	Coimbatore	72	256
64	Mailadumpara	Tamil Nadu	Coimbatore	121	484
65	Anna Nagar <i>Malasar</i> colony	Tamil Nadu	Coimbatore	16	110

Source: Data collected from ST development office Palakkad district, Kerala, department of Adi dravider and tribal welfare office, Coimbatore, KIRTADS, and from ST promoters in the study area.



Malasar Settlement in Kerala		Malasar Settlement in Tamil Nadu	
1 Thannaasi	18 Kinarpallam Pirivu	37 Indiranagar colony	54 Pullukaadu
2 Sundharam colony	19 Kinarpallam	38 Sreevinaaya colony	55 Kachithodu
3 Babaji Nagar	20 Nallur	39 Moonkilmada	56 Sungam
4 Velanthavalam	21 Chettiyarkulam	40 Subayya Goundar Thottam	
5 Chunnambukalthodu	22 Menonpara	41 Dam road Valayar	
6 Polippara	23 Eravattappara	42 Ayyaswami Goundar Thottam	
7 Kalliyampara	24 Maniyaranchalla	43 Saravana Goundar Thottam	
8 Keerampara	25 Mannamparakkalam	44 K K Bricks Valayar	
9 Gandhi Nagar	26 Karadippara	45 Pulampara	
10 Acent colony	27 Naduchalla	46 Ellakkadu	
11 Aattayampathy kalam	28 Araam mile	47 Ramanchalla	
12 Ayyampathy	29 Kunnankattupathy	48 Jagadeesh Goundar Kadu	
13 Mallampathy	30 Karimankunnu	49 Koottukaranpathy	
14 Chinnakoundannur	31 Neelamkochi	50 Karippaalachalla	
15 Parasikkal	32 Moolakkada	51 Kundalakuzhambu	
16 Kamaraj Nagar	33 Manimuthu Nagar	52 Chemmanampathy	
17 Aattayampathy New Colony	34 Manivelan	53 Kalliyampara	
	35 K K Pathy		
	36 Kuttipallam		

Fig. 1.6 Distribution map of *Malasar* ethnic community.

### 1.1.2.1 Socio-cultural background

*Malasar* believes their origin is from Kongu Nadu, now part of the Coimbatore district. The tribal group has two categories, *Maha Malasar* who lives on the top of the hills and have different culture and traditions, second one *Malasar*, or *Pathi Malasar* who lives on the plains and slopes near to the foot of hills. These two major tribes were recorded as different tribal groups because the culture and traditions were different in both tribes. According to Luiz (1962), the *Malasar* is the generic name of three tribal communities, known as *Maha Malasar* or *Malai Malasar*, *Mahcarivan*, and *Nattu Malasar*. These last two

are the same tribe, and the first one is entirely different from the *Malasar*. Apart from *Kadar*, this study focuses on the *Malasar* tribes (Table 1.2). They are day labourers under the landholders, many settlements names are of the landholder names. Few of them collect medicinal plants from forest areas. Some of them were migrated to Parambikulam area from the Palakkad gap and eastern foot hills for the dam construction job. They settled there and practiced fishing, wild honey collection and forest related labours to meet their daily needs. Now the majority work as forest watchers in the Parambikulam region. The *Malasar* in the Nelliampathy region of Palakkad District work as day labourers in the tea plantation apart from the forest related resource collection and jobs.

#### **1.1.2.1.1 Huts and Hamlets**

The traditional houses were huts made of bamboo as the other tribes do in the southern Western Ghats region and they have great skills in building bamboo houses. Teak leaves and Grass are used for roofing which differentiate that from the *Kadar* where they use leaves of reeds. The *Malasar* in the plains makes the homes with mud and bamboo. The grass and coconut leaves are used for roofing. Generally, they term '*Pathi*' or '*Challa*' for hamlets and they used to have concrete houses recently through various tribal development schemes of the state government in their villages.

#### **1.1.2.1.2 Social system**

*Malasar* lives in *Pathi* (Settlement), commonly they follow the nuclear family system. The *Mooppan* (Chief) conduct *Kulapanchayath* (Oorukootam or traditional gathering) for discussing society needs, issues and disputes. *Mooppan* takes the final decision in critical situations representing the village. The *Chinnamoopan* and *Vanderi* assist the *Mooppan*. They prefer cousin marriage to keep the genetic and cultural identity. Monogamy is the normal custom and Polygamy also permitted in the society. The dog is the best companion of the tribe men and the women carry an iron stick on their hair called '*Maigothi*'. They believe





**Fig. 1.7 Malasar ethnic community :** A. Malasar man & woman, B. Malasar's traditional hut, C. Kalliyampara Malasar colony, D. Malasar's temple near Kachithodu, E. 'Chimmakalyanam' (puberty celebration).





**Fig.1.8 Malasar ethnic community :** A. Grinding stone, B. Grinder, C. 'Koduval' (traditional bill), D. 'Maigothi' (An iron stick used to wear on hair by the Malasar women, E. Traditional push & pull toy, F. Malasar woman and child with the traditional toy, G. Glorification of God by Malasar community near Kachithodu tribal settlement.

the stick helps to avoid devils.

#### **1.1.2.1.3 Livelihood practices**

They are casual day labourers and labourers under landholders. Some of them are doing small scale cultivation and collecting Minor Forest Produces (MFPs) like Honey, Black Dammar (*Canarium strictum*) Fish, Medicinal plants like 'Orila' (*Desmodium gangaticum*), 'Moovila' (*Pseudarthria viscida*) and 'Kurunthotti' (*Sida rhombifolia*) etc. They depend on wild edible tubers, leafy vegetables, fruits, seeds and flesh of hunted animals during food scarcity.

#### **1.1.2.1.4 Birth**

For the erstwhile people, the delivery took place at home. The experienced older woman and mother of the pregnant lady will carry the delivery at their home and they will take care after the mother and new born. After delivery, they will bath the mother and baby in warm water. They use the leaves of 'Veppu' (*Azadirachta indica*) and the bark of 'Venga' (*Pterocarpus marsupium*) in bathing water to relieve body pain and wounds. In the early morning, they give 'rasam' (a hot vegetable soup containing dried red chilli, tamarind, garlic, tomato, etc...) to the mother to have an empty stomach. They believe this 'rasam' helps to contract the womb. For six months, they give the mother milk to the baby and after it slowly introduce other foods. The *Malasar* put a resin spot of 'Venga' on the forehead of the baby for protecting them from evils. The powder from crushed wood of the 'Venga' tree and its resin is used as a medicine for the healthy backbone of the mother. The unsalted porridge or bread made from a mixture of rice powder and the resin of 'Venga' is given to the mother. Seven days from birth is considered a pollution period.

#### **1.1.2.1.5 Puberty**

The realization of puberty is called '*Sadangakaradu*' or '*Chinnakalyanam*'. The first menstrual period of the girl is celebrated by the family with their relatives. During this period the mother and grandmother give nutritious food to the girl and in some settlements, a separate hut called '*Tinnai*' will be allowed to the girl. On the seventh day, they celebrate and give a great feast to their relatives. The maternal uncle will build a bamboo hut thatched by '*Eanth*' leaves (*Cycas circinalis*) called '*Kudusu*'. A group of women bathes her with turmeric '*Manjal*' (*Curcuma longa*) paste. After that, the girl stood on bamboo, mother and the cousins and maternal uncle shall pour water through a holed plate on her head. Then she wears a new dress and ornaments and the maternal brother shall bring her to the home.

#### **1.1.2.1.6 Marriage**

Marriage has to be fixed by the presence of '*Moopan*' and his associates. On the pre-wedding day, the fiancé and the fiancée sit on a chair in their houses and anointed with '*Manjal*' (*Curcuma longa*) and tie a '*Manjal*' piece on the hand. On the wedding day, the '*Poojari*' (Priest) carries the rituals such as two balls of cooked rice, coloured into red and black placed in a tray and lighted wicks are stuck into them. It helps to avoid evil presences. After its '*Thali*' (wedding chain) is tied on the bride's neck by the groom and then '*Moopan*' connect their hands. The couple eats a feast on the same leaf (banana leaf).

#### **1.1.2.1.7 Death**

The *Malasar* does bury the corpse along with his or her cloth and other things. The betel leaf splits and shows over the head of the corpse for the symbolization of the end of the life. Others will sing the goodness of the dead. On the third day after death, they serve cooked rice and meat to the soul.



#### **1.1.2.1.8 Worship and festivals**

They worship 'Attuvacheriyamma' and 'Magaliyamma' or 'Mahakaali' similar to dravidian Tamil culture. They conduct a festival at the time of April every year and offer rice and honey to God.

### **1.2 HYPOTHESIS AND IMPORTANT OBJECTIVES**

The ethnoecological knowledge of the indigenous community of the Western Ghats biodiversity hotspot is seldom explored and documented and there is no comprehensive and systematic ethnoecological studies from Indian region. The Anamalai landscape in the Southern Western Ghats is one among the three biodiversity hotspots within the Western Ghat Sri Lanka Biodiversity Hotspot rich in indigenous culture. The *Kadar* and *Malasar*, the two tribal communities inhabiting the Anamalai could have immense knowledge on their terrain, biota and the ecosystems and their relationship and that has not been documented so far apart from few works on ethnobotanical knowledge. The study seeks ethnoecological knowledge of the *Kadar* and *Malasar* ethnic communities in the Anamalai part of Western Ghats. The *Kadar* is an ancient indigenous forest dwelling and semi nomadic indigenous community with an umbilical relationship with the highly rainfed terrains of the Anamalais. Whereas the *Malasar* ethnic community are inhabitants of the drier regions and foothills and settled for forest labourers traditionally. Exploring the ethnoecological knowledge of these two ethnic communities can give a holistic understanding of ethnic knowledge associated with the terrain, climate, biota, ecosystems and the ecological relationship of the landscape. The following are the major objectives of the thesis.

#### **1.2.1 Document floral and faunal terminologies used by *Kadar* and *Malasar***

The ethnic communities have their own dialect. Language is the primary medium of the knowledge system. The study documented the indigenous terminologies of flora and

fauna and analysed the etymology and pattern and relationships for naming and how they classified the surrounding flora and fauna.

### **1.2.2 Document the terminologies used in understanding terrain features, Climate, and forest types by *Kadar* and *Malasar***

The study pooled the ethnic knowledge about the geography, topography in their traditional territories in the landscape. Their understanding of climate, seasons and terminologies of different forest types were documented and compared with existing scientific understandings.

### **1.2.3 Document the terminologies used and knowledge on ecological relationships and Functions used by *Kadar* and *Malasar***

The study identified and documented ethnic knowledge on various ecological relationships within the biota, the climatic and physical environment and their functions. Compared it with existing ecological scientific understanding and the ethnic interpretation of such relationships and functions around.

### **1.2.4 Document ecological theories used by *Kadar* and *Malasar***

Documented the ecological theories observed by the ethnic communities through their traditional knowledge, experience and experimentation. Most of these are stored as beliefs and myths and here tried to bring out their interpretations on these linking with various ecological theories known to scientific understanding.

### **1.2.5 Compare ethnoecological knowledge of used by *Kadar* and *Malasar* tribe**

The *Kadar* represent an ancient semi-nomadic ethnic community dependent more on the rainfed wet evergreen forest and riparian vegetation of the landscape and the *Malasar* more on the dry part of the landscape. A comparison of ethnoecological knowledge of these

two ethnic communities gives minute bioclimatic features of the landscape and their traditions.

### 1.3 SCOPE AND SIGNIFICANCE

Ethnoecology borrows methods from linguistic and cultural anthropology, and seeks to understand how cultures perceive the world around them through their classifications and organizations of their environment. Ethnoecology's strength lies in the fact that it helps researchers to understand how cultures perceive the society, conceptualizes that environment in which they depend on for living, and that it can determine what a society worth attending to in their ecological system. The importance of recorded ethno ecological knowledge helps to open a new path in scientific research, understanding ecological processes, and designing sustainable management of natural resources. This study will be a pioneer work on ethnoecological knowledge in Kerala region and also for the *Kadar* and *Malasar* indigenous groups. The UN has declared indigenous people's traditional rights on decision making, land under cultivation and habitation and common resources (UNDRIP, 2007). The Forest Right Act (FRA) 2006 in India recognises these including many provisions for traditional rights of individual and common in nature for sustainable use and management of the forest resources they traditionally depend on. This has been recognised for the first time in Kerala for the *Kadar* (Bachan *et al.*, 2015; Bachan, 2019). Many of the provision of FRA including the Intellectual property rights of the bioresources they depend (Section 3(1)k, sustainable use, protection and management of forest, wildlife, biodiversity and catchment of the watershed (Section 3(1)i and Section 5) and the CFR (Section 3(1)i) and its management need lot of inputs on their Ethnic knowledge. Hence the present Ethnoecological study can contribute to conservation and management of forest resources while securing traditional rights of the communities and also as a continuum for their traditional knowledge and linguistics related with ecology in future. This doctoral thesis can

contribute to the ethnoecological knowledge as a systematic and comprehensive ethnoecological work. The systematic approach widens the scope of the theoretical and practical definitions of the ethnoecology as suggested by Martin (2001).

#### **1.4 PLAN OF THE THESIS**

The ethnoecological studies are limited to the ethnobotanical, ethnozoological, Ethnoeconomical and ethnomedicinal knowledge of indigenous communities (Martin, 2001) and he requisites the need of widening its scope beyond this in theory and practice. The Casagrande (2000-2021) widened its scope into more on conservation and climate change chiefly at the application level. Here the thesis is presented in five chapters. The chapter one is the general introduction which explains the hypothesis, the *Kadar* and *Malasar* communities, the landscape level approach while defining the Anamalai landscape, its climate, geography and biological importance as part of the Western Ghats – Sri Lanka biodiversity hotspot. The chapter also brings enough reviews of literature and explain in detailed about the methodologies and the finally the objectives.

The second chapter deal with the classical approaches of the ethnoecology where the ethnofloristic, ethnozoological knowledge of both the *Kadar* and *Malasar* indigenous community explained focussing on the unique terminologies they have in comparison with the regional languages they are frequently exposed such as Malayalam and Tamil. The chapter has a brief introduction, explanation of methodologies adopted, the results are tabulated, also summarised into graphical representations and a brief summary is provided at the end.

The third chapter systematically brings the ethnoecological knowledge of the ethnic communities as ethnosystematics, ethnoeconomics, ethnolivelihood, ethnomedicinal and ethnocultural knowledge related with flora, fauna and ecosystems including method of

collection and associated knowledge. The chapter is also systematically arranged with the introduction, results in graphical and tabular forms in each sub sessions and a summary and conclusion at the end.

The fourth chapter further widens the scope of ethnoecology while narrating the ethnoecological knowledge on terrain, geography, climate as the knowledge on the abiotic factors of the ecosystems; autecological knowledge on species, knowledge on forest types and classification and finally the various theories and process of ecology. The chapter is provided with tables, schematic diagrams, graphical representations, narrations as evidences and all are discussed with other studies. This chapter is also systematically presented with an introduction, brief methodology, results and discussions and summary and conclusion.

The final chapter is the general discussion, summary and conclusion of the thesis where all the results were discussed systematically. Each subtopia starting from the ethnofloristic knowledge to the ethnoecological knowledge on ecological theories are summarised and discussed within the framework of existing literature. The chapter also synthesis the knowledge in the defined frame work and brings out its additions to the knowledge of expansion of ethnoecology as a unique discipline.

The final chapter is followed by the references and appendices, the appendices include detailed data collected from the Indigenous communities on flora and fauna, relevant other information which forms foundation of the thesis. This is again followed by the schedule which is used for the data collection and finally details of the informants who supported the generation of the thesis with prior informed consent.



## 1.5 REVIEW OF LITERATURE

### Ethnoecology

'The Races of Man' by Deniker (1900) provide the primitive aboriginals in India. Edgar Thurston (vol.2.1909 – vol.4.1909) in his work 'Castes and Tribes of South India' gives a detailed account of the *Kadar* and *Malasar* tribes of the Anamalai (Elephant Mountains). This may be one of the earliest and authentic works about this indigenous community. The book gives basic information of the both ethnic community like physical features, culture, occupation etc., of both the *Kadar* and *Malasar* community. 'Journey from Madras through the Countries of Mysore, Canara and Malabar' by Buchanan (1807) gives information about the *Malasar* tribe, 'The Tribes and Castes of Cochin' is a ethnographic survey of hill tribes and low cast people in Travancore and Cochin by Anantha Krishna Iyer (1909). This study provides basic information about the *Kadar* and *Malasar* community both cited in Thurston (1909). '*Kadar* of Cochin' by Ehrenfels (1952) provides detailed information about the *Kadar* ethnic community and this is authentic work about *Kadar* tribes of the rainforest. The ethnographic study provides information about the *Kadar* one of the pre-agricultural, pre pastoral, food-gathering tribes in India. This study provides a wide range of information about the *Kadar* ethnic community.

Earliest account on ethnoecological studies dates back to Harold Conklin's (1954), where he coined the term Ethnoecology in his Ph.D. dissertation 'The Relation of Hanunoo Culture of the Plant World'. 'An Ethnoecological Approach to Shifting Agriculture' (1954) of Swidden farmers gives the information about the application ethnoecological knowledge and classification of the environment. 'Hanunoo Color Categories' (1955) reveal the interrelationship between the classification system and human culture. The study identified two levels of colours among the Hanunoo community. 'Hanunoo Agriculture: A Report on an Integral System of Shifting Cultivation in the Philippines' (1957) provide the application of

ethnoecological knowledge in agriculture and the local management of climate, soil and taxonomical classification. 'Ethnoecology - The Diagnosis of Disease among the Subanum of Mindanao' by Frake, (1961) provide information about the taxonomical classification of plants by Subanum society. 'Tribes of Kerala' by Luiz (1962) provides details of 48 tribal communities in Kerala and their demography and socio-economic situations.

'The Encyclopaedia of Dravidian Tribes' by Menon (1996) provides lifestyle and important information of *Kadar* and *Malasar* tribes. The report 'Socioeconomic Survey of Primitive Tribes' by Chandrashekara Babu and Kutti Hassan (1996-97) gave a demographic picture of the *Kadar* tribes of the Kerala part. In the 'Ecological Anthropology' by Fowler, (1977) provided meaning of ethnoecology and relation of ecology in anthropology. 'Ecological Anthropology' book edited by Hardesty (1977) gives detailed account on history and definition of ethnoecology. The book described the human behaviour related with the ecology, history, evolution etc., and discussed the ethnoscience and anthropology in different chapters. 'Ethnoecology as Applied Anthropology in Amazonian Development' by Posey *et al.* (1984) gives ideas about the application of ethnoecology for sustainable resource utilization in the residents of Amazonia.

The anthropologist Brien A. Meilleur (1986) in his Ph.D. dissertation in 'Alluetain Ethnoecology and Traditional Economy: The Procurement and Production of Plant Resources in the Northern French Alps' is one of the earlier ethnoecological studies. The study points out the ecological understandings and economic management of the high mountain peasant community of Les Allues in the northern French Alps. 'What is Ethnoecology? Origins, Scope, and Implications of a Rising Discipline' by Toledo, V (1992) provides detailed account on ethnoecology and further readings. The book 'Ethnoecology Situated Knowledge/ Local Lives' written by Virginia D. Nazarea (1999) gives a collection of different views about the human perception of the environment and the conservation, management of natural

resources. This book contains important papers of international experts in various places in the world presented in a conference at the University of Georgia in 1995.

'Ethnoecology of the Yucatec Maya: Symbolism, Knowledge and Management of Natural Resources' by Narsico and Victor (2005) provided information about how indigenous farmers (Maya) perceive, know, use and manage their landscape as whole. 'Ethnobiology and Ethnoecology' by Gary J. Martin (2001) describe economic botany, ethnobotany, ethnozoology, ethnoecology, and ethnobiology and the broad scope of botany in ethnoecology. The study reveals different aspects and applications of botany in a wide mirror of ethnoecology and ethnobiology. 'Ethnoecology, Resource Use, Conservation and Development in a Wapishana Community in the South Rupununi, Guyana' is a Ph.D thesis of Henfrey (2002) gives information about the ethnoecology of a particular community and history of ethnoecological works earlier.

The ethnoecology as a broad discipline expanded by David Casagrande, where he gives a definition for ethnoecology. His Ph.D. Dissertation on 'Ecology, Cognition, and Cultural Transmission of Tzeltal Maya Medicinal Plant Knowledge' (2002) provides the information about traditional knowledge on medicinal plants suitable for various diseases. 'Human Taste and Cognition in Tzeltal Maya Medicinal Plant Use' (2000) provided how the Mayan community taste different medicinal plant and identifies the species along with the medicinal property. 'An Introduction to Ethnoecology and Ethnobotany Theory and Methods' by Andres Gerique (2006) provides different research methodologies in ethnobotanical and ethnoecological studies.

'Evaluating Rapid Participatory Appraisal as an Assessment of Ethnoecological Knowledge and Local Biodiversity Patterns' by Jocelyn *et al.*, (2010), in this study the author describes the importance of ethnoecological knowledge in biodiversity monitoring. 'An

Ethnoecological Approach to the Study of a Village in Himachal Pradesh by Anindita Ghosh (2012) provide information about the 'ethnoecological approaches in Agriculture and other livelihood practices in a Baliana Village of Kangra district'. 'Traditional Knowledge on Mud crab; Ethnoecology of *Scylla serrata* in Ratnagiri coast Maharashtra' by Nirmale *et al.*, (2012) gives information about the local people perception of the crab and this helps to conserve the crab and sustainable management. Rita Singh and Pragya Sourabh (2012) studied 'Ethnoecology of Indian Ephedras', the study gives an account on ecology and economic uses of Ephedras.

The article 'Analytical frameworks for traditional ecological from the perspective of ethnoecology' by Cheng Gong *et al.*, (2014) argues that the traditional ecological knowledge (TEK) is a core domain of ethnoecology which is a stage of rapid development and one of the forefronts of ecology. The study, 'Ethnoecological Importance of Plant Biodiversity in Mountain Ecosystem with Special Emphasis on Indicator Species of Himalayan Valley in Northern Pakistan' by S.M. Khan *et al.*, (2014) provide information about the importance of ethnoecological knowledge of local people to utilize for conservation of the natural resource and the knowledge about the floristic diversity in different vegetation.

'Ethno-ecological Studies on the Medicinal Plants of Western Ghats Region with Special Reference to Valparai Tribes' by Jeniffer *et al.*, (2014) gives information about ethnoecological knowledge of medicinal plants collected from indigenous communities of *Kadar*, *Mai Malasar*, *Muthuvan* could be the only account from our region. 'Ethnoecology - The best Medicine Against Allergy?' by Zsolt Molnár (2015) shares a journey of him from botany to ethnoecology and the interconnection of botany and ethnoecology. 'The Value of Ethnoecological Knowledge of the Minahasans: Repositioning Traditional Biocultural Knowledge in Indonesian Environmental Planning' by Cynthia Wuisang & David Jones (2015) gives information about role of ethnoecological knowledge in a national

environmental planning. It helps to better management of landscape, forest and natural resources.

Master's thesis on 'A Preliminary Assessment of Ethnoecological Knowledge of *Kadar* Ethnic Community of Vazhachal Forests, Western Ghats, Kerala', by Vineesha and Amitha Bachan (2016) could be one among the only previous work from *Kadar*, which gives information about the ethnoecological knowledge of *Kadar*. Vegetation, terrain, some of the information about the plants and other resources are given in the thesis. A study 'Ethnoscience Implication of Classification as a Socio-Cultural Process' (2017) by David Casagrande gives an account of knowledge about the ethnic communities to classify their surroundings. The work focused on the taxonomic classification and changes in the knowledge system due to cultural transmission. 'Ethnobotanical and Ethnoecological Study of the Most Important Edible, Medicinal, and Industrial Species in the Grasslands of Khalil Abad Region, Zarrin Dasht, Fars Province, Iran' by Kord *et al.*, (2019) gives information about the difference between ethnobotanical and ethnoecological knowledge and the importance of indigenous knowledge about the flora.

### **Ethnobotany and Ethnozoology studies**

The knowledge about medicinal plants used by *Kadar* tribes provided by Udayan *et al.*, (2005) in 'Medicinal Plants Used by the *Kadar* Tribes of Sholayar Forest, Thrissur district, Kerala'. 'Wild Edible Plants Traditionally Used by *Kadar* Tribes of Vazhachal Forest Division, Thrissur, Kerala' by Chaithanya *et al.*, (2015) has documented 55 edible plant species used by *Kadar* community.

'The Nature and Scope of Ethnobotany' by Jones (1941), 'A Study of Ethnozoology of the Prehistoric Indians of Illinois' by Baker (1941), 'Seri Ethnozoology: A Preliminary Report' by Malkin (1956), 'Ethnozoology of the Maya: An Analysis of Fauna from Five Sites

in Petén, Guatemala’ by Pohl (1976), ‘Kaapor Ritual Hunting’ by Balée, W. (1985), accounts for earliest ethnozoological works. ‘Glimpses of Indian Ethnobotany’(1981) and ‘A Manual of Ethnobotany’ (1995) by Jain, S.K ‘An Outline of Ethnobotanical Research in India’ by Binu *et al.*, provide comprehensive study of ethnobotany and its relevance and applications. ‘Heniger, J. Van Reeds’s Preface to Volume 3 of Hortus Malabaricus and Its Historical and Political Significance’ by Manilal, K, S (1980) provides basic information about the Hortus Malabaricus.

‘Arogyapacha (*Trichopus zeylanicus*) the Ginseng of Kani Tribes of Agasthyar Hills for Evergreen Health and Vitality’ by Pushpangadan *et al.*, (1988) provide information about the use and medicinal importance of *Trichopus zeylanicus* used by *Kani* tribes in Kerala. ‘Process as Resource: Advances in Economic Botany’ by Alcorn (1989) provides information about the Methodology to be used for documenting traditional knowledge of a society. ‘People and Plants Conservation Manual’ by Martin, G.J. (1995) has documented 29 medicinal plant species and their habitat and ecological significance. ‘Medicinal Plants of India’ by Yoganarasimhan, (2000) provide information about the medicinal plants used by different areas in India and flowering plants of Western Ghat region. ‘Ecological Ethnobotany: Stumbling Toward New Practices and Paradigms’ by Davidson-Hunt (2000) has provided the definition of ethnoecology and the difference between ethnobotany and ethnoecology. ‘Impact of River Valley Projects on the Endemic *Kadar* Tribes of Chalakudy River Basin’ by Bachan (2006) gives information about the relocation history of the *Kadar* community due to the dam construction. The study mentioned that the powerhouse construction has affected their natural habitat.

‘Ethnomedicinal Knowledge Among *Mala Malasar* Tribe of Parambikulam Wildlife Sanctuary, Kerala’ by Yesodharan and Sujana (2007) provides 80 medicinal plants used by *Malamasar* tribes in Parambikulam. ‘Fauna Used in Popular Medicine in Northeast Brazil’



by Alves (2009), ‘Animals: from Mythology to Zoology’ by Allaby (2010), ‘An Ethnozoological Survey of Medicinal Animals Commercialized in the Markets of Campina Grande’ by Alves *et al.*(2010), ‘Relationships Between Fauna and People and the Role of Ethnozoology in Animal Conservation’ (Alves, 2012) also provide ethnozoological information. ‘Medicinal Plants Used for Treating Body Pain by the Tribals in the Pathanamthitta District, Kerala, India’ by Binu, S. (2011) provides information about ten medicinal plants used for treating body pain. ‘Ethnic Herbal Practices for Gynaecological Disorders from Urali Tribes of Idukki District of Kerala, India’ by Ajesh, T. P. and Kumuthakalavalli, R. (2012) provide information about 29 plant species. ‘Ethnozoological Study of Animals Based Medicine Used by Traditional Healers and Indigenous Inhabitants in the Adjoining Areas of Gibbon Wildlife Sanctuary, Assam, India’ by Borah and Prasad (2017), ‘The Role of Ethnozoology in Animal Studies’ by Nóbrega and Lopes (2018) provide definition of ethnozoology and medicinal fauna. ‘Ethnobotanical Medicines Used by the Kani and Kurichiyar Tribal Communities of Kerala’ by Purushothaman and Irfana (2020) has recorded 22 plant species that have medicinal value from both communities. Gouthami V. and Amitha Bachan K.H. (2019), provide information on the distribution and demography of the Kadar ethnic community. Amitha Bachan, K.H. and Devika, M. A. (2020) provide information about the utilization of bamboo by the *Kadar* community.

### **Floristic and other related studies contributing to methodology**

‘The Fauna of British India Including Ceylon and Burma’ by Blanford, W.T. (1888 - 1891), ‘Flora of Presidency of Madras’ by Gamble (1925) were some of the earliest floristic works helped to identify documented flowering plants and collected herbarium specimens for the study.

‘The Influence of Underlying Rocks on the Character of the Vegetation’ by Cowles (1901) provided basic knowledge about the succession. ‘The Individual Concept of the Plant

Association' by Gleason (1926) provides knowledge about the ecological theories. 'Nature and Structure of the Climax' by Clements (1936) gave an account of climax vegetation. 'The Design of Social Research', book written by Ackoff (1953) narrates how to perform research in social science. This book gives information about sampling and interviewing techniques.

'A Revised Survey of the Forest Types of India' by Champion and Seth (1968) and 'A Preliminary Survey of the Forest Types of India and Burma' by Champion, (1936) provides 16 different major forest types in India and its sub classifications. That is being used in the study to compare ethnoecological knowledge on vegetation types. 'Origin, Distribution and Phylogenetic Affinity of the Species of *Mangifera* L.' by Mukherjee, (1953) provide information about the species *Mangifera*. 'The Diagnosis of Disease Among the Subanum of Mindanao'(1961) and 'Cultural ecology and ethnography'' (1962) by Frake, C.O. provide the importance of traditional knowledge among the local community. Understanding of ecosystem of a community, the perception of the surroundings develops holistic knowledge than ethnobotanical perception.

The Book of 'Indian Animals' written by Prater, (1971) provide essential authentic information about the fauna in the Western Ghats. 'Folk Biology in the New Guinea Highlands' by Bulmer (1974) has provided importance and application of the local people in New Guinea. The book 'Ecological Transition: Cultural Anthropology and Human Adaptation' written by Bennett, (1976) explains the ecology interconnects with human culture. This book explained the interdependence of human culture and conservation, economy of natural resources. The interdisciplinary approach to ecology helps to a holistic understanding of the world.

'Field and Herbarium Methods' by Jain and Rao (1977) give knowledge about herbarium preparation. Sampling Techniques by Cochran (1977), 'Policy Data as a Social

Process: A Qualitative Approach to Quantitative Data' by Bogdan *et al.*, (1980), 'Rapid rural appraisal: rationale and repertoire' (1981) and 'Rural development: putting the last first' (1983, 1984) by Chambers and Robert were contributed to the methodology.

'Flora of Tamil Nadu, India, series 1: Analysis' by Nair & Henry (1983) gave information about the flora in the Western Ghats region. 'Introduction to Qualitative Research Methods: The Search for Meanings (2nd ed.)' by Taylor, S. J. & Bogdan, R. (1984), 'An Ethnobiology Source Book: the Uses of Plants and Animals by American Indians' by Ford (1986) provided definition of ethnobiology. 'Traditional Agriculture in South East Asia' by Marten (1986) supported with definition and importance of traditional knowledge and the local applications. 'Worldview Theory and Science Education Research: Fundamental Epistemological Structure as a Critical Factor in Science Learning and Attitude Development' by Cobern (1989) shaped the concept and miss concepts of worldview theory among the science students and the research world. 'Practical Sampling' written by Henry (1990) gives information about the different sampling methodology and techniques.

'Flora of Palghat District (Including Silent Valley National Park, Kerala)' by Vajravelu, E. (1990) provided information about the flora in Palakkad district, Kerala where the present study is more concentrated especially for *Malasar* community. 'An Introduction to Tropical Rainforests' written by Whitmore (1990) gives authentic and essential information of rainforests and composition of flora and fauna. 'Mammals of Indo-Malayan Region: A Systematic Review' by Corbet and Hill (1992). IUCN Red List Categories, approved by the 40th Meeting of the IUCN Council Gland, Switzerland, 30 November 1994 and 'Threatened Biotas: Hot Spots in Tropical Forests' by Myers, N. (1990) provides information about the threatened species.

‘The Southern Western Ghats; A Biodiversity Conservation Plan’ by Nair, S.C.(1991) gave detailed narration about the pattern of distribution of flora, fauna, vegetation and terrain in the Western Ghats. The work points out that misuse of wealth of nature in Western Ghats cause degradation of biological biodiversity in the areas. Final Technical Report of All India Coordinated Research Project on Ethnobiology (AICRPE, 1992-1998) by Government of India provides information about traditional ecological knowledge. ‘Indigenous Knowledge for Biodiversity Conservation’ by Gadgil *et al.*, (1993) gave information about the role of indigenous knowledge in the conservation of nature. The study points out the systematic use of indigenous knowledge for sustainable development and the future.

‘Biodiversity in India, Floristic Aspects’ by Raghavendra Rao (1994) provides floristic diversity of India. ‘Flowering Plants of Thrissur Forests’ by Sasidharan, N. and V.V. Sivarajan (1996) supported identification and information of plant species collected from the both ethnic communities. ‘Western Ghats: A life span’ written by Gadgil (1996), ‘Mammalian Resources’ by Balakrishnan, (1997), ‘Checklist of Indian Mammals’ by Nameer, (2000), ‘Endemic Bird Areas of the World’ by Statters field *et al.*, (1998) were some other works supported in scientific validation of the collected ethnobiological information.

‘Village-based Management of Marine Resources in Vanuatu’ by Johannes (1998) provided the importance of community-based conservation and use of local knowledge system in the public conservation protocols. ‘Working with Indigenous Knowledge: A Guide for Researchers’ book written by Grenier (1998). It’s a comprehensive guide about the reviews of indigenous knowledge and applications in the current trends of society. ‘Designing Qualitative Research’ by Marshall C. & Rossman G.B. (1998) provided information about the qualitative data analysis. Report of the Workshop ‘Conservation Assessment and Management Plan for Mammals of India’ by Molur, *et al.*, (1998) gave information about the distribution of mammals in India. ‘Rediscovery of Traditional

Ecological Knowledge as Adaptive Management’ by Berkes *et al.*, (2000) points out that Tradition Ecological Knowledge (TEK) is an alternative knowledge of the indigenous community. This narrates TEK as the best tool for monitoring, conserving and managing ecosystems and functions. ‘Overview—Participatory Processes in the North’ by Flower *et al.*, (2000) provided information about the participatory rural appraisal methodology and its benefits in research.

‘Floristic Studies in Parambikulam Wildlife Sanctuary’ by Sasidharan, N. (2001) and ‘Vascular Flora of Parambikulam Wildlife Sanctuary’ by Sujanal. P. (2006) provided information about the floral diversity of the sanctuary, 1434 plant species were discussed in the former and information about the important vascular plants were discussed in the later. Biological Diversity Act 2002 was enacted by the Parliament of India. The law stands for conserving biological diversity in the nation. This also provides legal remedies for grant intellectual property rights for Traditional knowledge. The report from the International Council of Science (ICUS) in 2002 discusses the scientific validity, application, and scope of the traditional knowledge.

The KFRI Handbook ‘Biodiversity Documentation for Kerala, Part 8: Fresh Water Fishes’ by Easa and Shaji (2003) provides scientific names and other information about the fresh water fishes. ‘Value Addition and commercialization of Biodiversity and Associated Traditional Knowledge in the Context of the Intellectual Property Regime’ by Pushpangadan. P. and Narayanan Nair (2005) provide the information about the Value Addition and commercialization of Traditional knowledge. Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 recognizes the rights of forest-dwelling communities on land, natural resources, habitat, etc., this act overcomes the historical injustice on forest dwelling communities and also provisions for IPR.



'The Ecosystem Profile of Western Ghats and Sri Lanka Biodiversity Hotspot of Western Ghats Region' by Bawa *et al.*, (2007) gave a detailed about the vegetation pattern, flora and fauna in Western Ghats. 'Ethnobiology in Four Phases' by Hunn (2007) state that ethnobiology has four phases one is ethnobotany and ethnobiology, then the cognitive ethnobiology, third one is ethnoecology and the last indigenous ethnobiology. United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) in 2007 recognizes rights to protect of the traditional knowledge and culture of an indigenous community. 'Indigenous Knowledge and Cultural Values in Ewe Musical Practice: Their Traditional Roles and Place in Modern Society' by Gbolonyo (2009). This Ph.D. thesis provided contribution of indigenous knowledge in culture and other domain of human life and relevance in modern society.

The Government of India, Census Report in 2011 provides the population details of tribal communities in Kerala. Bachan *et al.* (2011) provides 156 *Kadar* terminologies from their world views as part of the developing a multilingual education pedagogy. IUCN technical report of Challenges and responses to assure the credibility of the World Heritage Convention (2012), provided major heritage cites and other information about the Western Ghats.

'Educational Research: Quantitative, Qualitative, and Mixed Approaches' by Christensen & Johnson (2012), 'Purposeful Sampling for Qualitative Data Collection and Analysis in Mixed Method Implementation Research' by Palinkas *et al.*,(2013), 'Research Methods for Business Students' by Saunders *et al.*, 'Qualitative Research: The Essential Guide to Theory and Practice' by Savin-Baden & M. and Major, C. (2013) were contributed to the methodology.

'Endemic Trees of Western Ghats—A Check List from Wayanad District, Kerala' by Volga *et al.* (2013) gives information about the bioclimate of the Western Ghats. 'Implication for Policy' by Ajani *et al.* (2013) provide the characteristics and importance of Traditional knowledge. Bachan *et al.* (2014) provide a detailed account of CFR areas, traditional resource use boundaries and terrain terminologies by the *Kadar* community from the Kerala part. 'Flora and Ecology of Riparian Forests in the Chalakkudy River basin, Anamalai Part of Southern Western Ghats and its Conservation Significance' by Bachan and Pradeep (2015) provide information about the flora of the riparian forests in the Chalakkudy river basin where the *Kadar* community are distributed.

'Field Guide on Mammals Check List of Mammals in the Vazhachal Forest Division' by Bachan *et al.*, (2016) provide scientific name and family of mammals in the Vazhachal Forest Division along with ethnofaunal terminologies by the *Kadar*. 'Sampling Method in Research Methodology; How to Choose a Sampling for Research' by Hamed Taherdoost (2016). 'Social Interpretive Research: An Introduction' by Rosenthal, G. (2018) provides knowledge about the different approaches to rural appraisal methodology and gives information about an effective methodology for gathering information from the community. 'Agriculture in Relation to Socioeconomic Status of *Tharu* in Chitwan of Nepal' by Sharma *et al.*, (2021) discuss the indigenous traditional knowledge of *Tharu* community. The community possess rich traditional knowledge on agriculture hence has contributed to the structural design of the present study.

## ***Chapter 2***

# **BIODIVERSITY KNOWLEDGE OF *KADAR* AND *MALASAR* ETHNIC COMMUNITY**

## **2.1 INTRODUCTION**

The ethnic knowledge, especially of the indigenous communities living within and around the tropical forests has gained more attention in this decade not only because of its knowledge value, but its scope of understanding ecosystems as a whole. The local knowledge or the local traditional knowledge is a key factor which enables sustenance of the ecosystem and its sustainability dependence on the local dependent people. Another key element is in which it provides direct and indirect ecosystem services to the people across the globe. The United Nations declarations actions for climate change at cop 15 targeting for the 2013 emphasise more on indigenous people-based conservation and sustainable use of the resources as the key element in ensuring conservation of the ecosystem across the globe as well as for the benefit of mankind. This is very important in the economic sphere, in health, in eradication of poverty and in beating climate change. According to the UN (2019), traditional knowledge is the foundation of indigenous peoples' identities, cultural heritage, civilizations, livelihoods and coping strategies over several centuries. Its promotion, protection and preservation are fundamental for the sustainability of the livelihoods of indigenous peoples, their resilience to human-made and natural disasters and the development of their communities. It is also at the core of the rights of indigenous peoples.

Knowledge on biodiversity is of prime importance when we consider the ethnic knowledge or the ethnoecological knowledge as a whole. Likewise, we understand ecology or ecosystem dynamics through the differential expression of different species including plants, animals and the microbial world. That is identified through usually at the species level and

their permutation combination into population and communities ultimately reflecting as differential expressions of the ecosystem as a whole. All kinds of ecosystem characteristics, ecosystem dynamics, ecosystem services and all are reflected through as an expression of biodiversity. Hence it is imperative to document biodiversity knowledge as an initial step for understanding ecological information especially related with the traditional or indigenous communities.

The indigenous people are otherwise termed ecosystem people since their worldview formed within or around the ecosystem they live in (Bachan, 2019). Each and every bit of knowledge or information is acquired through observing the flora and the fauna around them. The primary vocabulary of any indigenous community, even though they don't have script but most of their dialect have identity as a unique language which recognizes different kinds of objects around their world. Their world view (Cobern, 1989) is usually formed based on the living beings, living or non-living entities around their surroundings, usually around the village, forest and other kinds of the different ecosystems they are in interaction including man modified urbanised systems (Bachan *et al.*, 2014).

The terminologies on different species of flora and fauna forms the alphabets or initial vocabulary of their knowledge and it has been documented all across the world which was started during this period as ethnobotanical knowledge or ethno zoological knowledge or ethno medical knowledge as a whole we can say as ethno biological information (Sabeena *et al.*, 2016). Ethnobotany is the discipline concerned with the interaction between people and plants (Jones, 1941), ethnobiology is the study of the direct inter-relationship between human population and the plants and the animals in their environment (Ford, 1986; Malkin, 1956; Pahl, 1976; Balee, 1985; Alves *et al.*, 2010; Alves, 2009; Borah and Prasad, 2017; Nobrega and Lopes, 2018; Allaby, 2010). Whereas ethnoecology is the science of how people understand the relationship between humans, animals, plants and physical elements of a local



environment (Davison – Hunt, 2000). The tropical forest has nearly 80 percentage of the world's terrestrial flora and fauna and all are within different indigenous territories across the globe. The tropical forests are distributed as old-world tropical forests of Africa, Indo-Malaysia and the neo-tropical worlds of South America (Whitmore, 1990). The Western Ghats of the Indian peninsula form one of the important mountain ranges holding a major portion of the tropical moist forests. This along with the forest seen in the North-eastern India and the Malaysia region together forms the entire tropical forests within the Asian continent. India lies in the tropical region of the Asian continent. India is one of the megadiversity nations in the world and has 7% of global flora (47,000 plant species) and 6.5% of fauna (81,000 species) (Sinha *et al.*, 2010). There are four biodiversity hotspots in India, which are the Himalayas, Indo- Burma region, Eastern Himalayas and the Western Ghats. India's hotspot, the Western Ghats region (Mayers, 1990; Gadgil, 1996) has been declared a world heritage site by IUCN (2012). The mountain chain is 16000 km long (Bawa *et al.*, 2007), parallel to India's Western coast from its southern tip of the peninsula at Kerala and Tamil Nādu then Karnataka at its southern region, Maharashtra, Goa and ends in Tapti River valley near Gujarat. The species richness and endemism are varied by the different regions of Western Ghats. The highest biodiversity and endemism observed in the Southern Western Ghats is because of its favourable climatic condition, rainfall, and a short dry season (Volga *et al.*, 2013). This area is flourished with a diversity of plants and terrestrial animals and birds. Birdlife international recognized this area as an endemic bird area (Stattersfield, 1998). And the heritage site has 7,402 species of flowering plants (Bawa *et al.*, 2007). And 12000 species are lower groups of flowering plants (Rao, 1994; Yoganarasimhan, 2000; Nair & Henry, 1983), 139 species of mammals, 508 species of bird, 179 amphibian species, 6,000 insects, 290 freshwater species and 325 globally threatened taxa (Bawa *et al.*, 2007).

The documentation of Ethnobiological information of local communities in India can go back to the fifteenth century. One of the important works was Van Reed's *Horthus Malabaricus* (1678-1693) in which they documented over 742 plants of angiosperms from the Malabar region. Since in 1950s research on ethnic knowledge of plants intensified 2532 plants were recorded as folk medicine (Jain, 1994). Janaki Ammal initiated studies in food and ethnobotany in India and 'Glimpses of Indian Ethnobotany' (Jain,1981) is the pioneer book dealing with Indian ethnobotany. In 1988, Pushpangadan et al., published a paper on 'Arogyappacha' (*Trichopus zeylanicus*), the 'ginseng' of 'Kani' tribes of Agasthyar hills (Kerala) for evergreen health and vitality. They produce 'jeevani' drugs from the plant and got a patent for the production. In 1992 Binu *et al.*, gave a compilation of published ethnobotanical studies in India. Singh (2017) published his work on biodiversity and tribal knowledge and life in India.

The ethnic community are 5635 distinct indigenous communities in India of which 700 are notified as Scheduled tribes (STs) including 75 as Particularly Vulnerable Tribal Groups (PVTGs) (Bachan, 2016). The total ST population in India is 8, 43, 26, 240 (8.2%) of total population in India (2011). *Kadar* are semi-nomadic hunter gatherers, but very much adapted to the evergreen forest habitats. They have very good knowledge about the evergreen forests, trees, animals, every simple indication of animal sighting, even sound, scatter, smell or pugmark reveal to them about the animal and its whereabouts. Probably most of them had been completely hidden in the rich deep evergreen forests invisible from the outer world up to the 18th century (Bachan, 2006). According to the earlier estimates of the tribal department and the Government, the *Kadar* tribes were distributed in the 15 settlements of Kerala and are restricted to Chalakudy river basin. *Malasar* are one of forest dwellers in Western Ghats. They are found south of Palakkad district of Kerala and Coimbatore district of Tamil Nadu. Occupy moist deciduous forest (Menon, 1996). According to the 2011 census, the population

of the *Malasar* tribe was 3195. The ethno-biological information on *Kadars* can be traced out from sum of studies by Ehrenfels (The *Kadar* of Cochin. Madras, 1952), Thurston (Castes & Tribes of Southern India, 1909) where they describe some of the plants and animals that were used by *Kadars* for their livelihood and cultural and traditional important and no other detailed information are available since them. Sabeena *et al.* (2016) listed 44 medicinal plants used by *Kadar*. The *Malasar* tribe described by Ananth Krishna Iyer in the book The Tribes and Castes of Cochin, (1909) and Madhava Menon (The Encyclopaedia of Dravidian Tribes, 1996). Since the ethno biological information forms the foundations for understanding or describing ecosystem and ecological knowledge of any indigenous community. The objective of this chapter is to understand different floristic and faunal information within *Kadar* and *Malasar* communities. This study visualised as a foundation of going deep into the ethnoecological information.

## **2.2 METHODOLOGY**

### **2.2.1 Sampling procedure**

Key informants were selected from the 22 villages of *Kadar* and 65 of *Malasar* ensuring 50% sampling of the villages (11/22 and 33/65). A total of 150 respondents from each tribal community were interviewed for the data collection. Respondents of different strata such as different gender (Male, Female, Third gender), age (ranges between 12 – 18, 19 - 35, 35 – 50, 50 – above) and occupational categories such as Forest dwellers, Traditional medicinal practitioners, Fishers (Fish expert), Forest labours, Plantation labours, Farmers, etc. The sampling ensured 2- 6 % of the total population. The distribution and demographic data were collected from various secondary information and were scrutinised for accuracy during the study. The *Kadar* are distributed in 22 settlements within Kerala (16) and Tamil Nadu (6). Among the 16 settlements within Kerala, nine are confined to Thrissur, and seven colonies are within Palakkad districts. The total population of *Kadars* is 2395 (2019) and 150



**Fig. 2.4 Plant collection and herbarium preparation :** A. *Adina cordifolia* near to the Kuriyarkutty Kadar village, B. Collecting *Aglaomorpha quercifolia* from Parambikulam Tiger Reserve, C, D, E & F. Herbarium preparation, F. Mounting of specimen on herbarium sheet.





**Fig. 2.1** Secondary data collection and field visit : A.&B. Library visit in KIRTADS, Kozhikode, C. Library visit in KFRI, Peechi, D. *Kadar* children of Kalluchaadi village identifying the photographs of fauna, E. With the *Malasar* man collecting medicinal plants near K K Pathi village, F. A *Kadar* woman of Udumbanpaara village near Valparai identifying the photographs of fauna.





**Fig. 2.2** Field visit on *Kadar* villages : A. With the Chief of Kuriyarkutty, B. Cherunelli, C. With Geetha (Chief of Vazhachal *Kadar* village), D. Earth Dam, E. Malakkapara - Perumbara *Kadar* vil-lage, F. Thekkady, Parambikulam.





**Fig. 2.3** Field visit on *Malasar* villages : A. & B. Sungam, C. Kachithodu, D. Kalliyampaara, E. Araam mile, F. Mallampathi, G. Pullukaadu, H. K K Pathi, I. Naduchalla.

informants were interviewed from the *Kadar* community among all of their distribution range. The *Malasar* ethnic community is distributed in 65 settlements of which 56 settlements are situated in panchayaths of Vadakarapathi, Puthusseri, Muthalamada, Nelliampathi, Perumatti, Eruthempathi, Kozhinjampara, in the Palakkad district of Kerala. The nine settlements in the taluk of Udumalaipettaiin to Coimbatore North, of Coimbatore district of Tamil Nadu. The total population was 5975. A total of 300 informants were interviewed from both the communities.

### **2.2.2. Scientific validation of the ethnobiological information**

Exhaustive field work was done in the villages. *Kadar* lives in the quarter of the forest area or an isolated dwelling place of the tribe and usually, *Kadar* uses many terminologies for plants and also plant groups for example ‘*Adak*’ (‘*Cheera*’) use of different leafy vegetables and so on (Sabeena *et al.*, 2006). *Malasar* community are also forest dwellers and some of them are agriculture laborers (Luiz, 1962). All the information was documented in semi-structured interviews conducted and recorded on a phone with pre informed consent. Photographs of the plants were taken during field visit and are shown to the informants for confirmation of the identity for common species. The informants were taken to the field and plants were collected for identification for difficult taxa and the voucher specimens were collected, the vernacular name of the plant and the characters were recorded with the consent and help of the informants. The plants were collected with a flower or fruit for herbarium preparation, and vernacular names and other information about the plant were immediately recorded in the field book. Field collection numbers were given to each specimen. Herbarium sheets were prepared according to the methodology described by Jain and Rao (1977). The herbarium sheets were deposited at the M. E. S. Asmabi herbarium (AH) and some important herbariums were deposited in Calicut university herbarium (CALI).



The plants were diagnosed with the use of a dissection digital microscope and were identified with the help of Flora of the Presidency of Madras (Gamble, 1925), Flora of Thrissur Forests (Sasidharan and Sivarajan, 1996), Flora of Parambikulam (Sujanapal, 2006) and Flora of Palakkad (Vajravelu, 1990). Documented terminologies for major fauna from the survey schedule and published checklist of fauna by Kerala Forest and Wildlife department, other literature sources (Blanford, 1888, 1891; Prater, 1971; Balakrishnan, 1997; Corbet and Hill, 1992; Molous *et al.*, 1998; Nameer, 2000; Yadav, 1997, Susanth, 1926, 2012; Subramanian *et al.*, 2008, Esa and Shaji, 2003, Shaji and Laladas, 2013) and websites like iNaturalist and India biodiversity portal. Photographs were also collected for confirmation. Before data analysis, the collected flora and fauna were reconfirmed through convenient sampling (Bornstein *et al.*, 2017) as well as with the help of photographs. Threatened species were identified from the IUCN red list. The unique terminologies were documented and categorized as Malayalam, Tamil, Telugu, Kannada.

Each ethnic name collected was pooled and tabulated for conformity. Important or key informants were identified from each community and also from each clan or villages from the pooled data. The ethnobiological nomenclature was again discussed with each of the selected key informants for its proper accent, regional or variations within the clans were accommodated.

## **2.3 RESULTS AND DISCUSSION**

### **2.3.1. Biodiversity knowledge of *Kadar***

#### **2.3.1.1 Ethnofloristic knowledge of *Kadar***

The ethnoecological knowledge gives an understanding of how ethnic communities recognized their environment (Marten, 1986) and how they are taxonomically classified, as well as the nomenclature system (Conklin, 1954, 1955, 1957) and Frake (1961, 1962), suggested that traditional knowledge and techniques must be recorded for future

development. All the information is communicated through their local language so that linguistics documentation helps to explore conceptions of the environment (Folwer, 1977). Related ethnoecological studies so far have the Hanunoo folk language in Phillipines identified 1600 different plants (Conklin, 1954, 1955). The Negrito swidden people situated in western Luzon and the Phillipines recognized different kinds of birds with more than 80 species. And also, their abundance, behaviour, the relationship between bird and environment, functions were described (Marten, 1986). The Karan tribe in New Guinea, are agriculture-oriented tribes, identified and classified different kinds of plants (Blumer, 1974).

*Kadar* and *Malasar* commonly use the Dravidian language with a large folk terminology (Bennet, 1976), including terminologies for related and surrounding life forms in their habitat. The flora and fauna diversity of *Kadar* and *Malasar* varied according to their inhabiting vegetation type, the interaction, and dependency on nature for their livelihood. They give particular terminologies for different flora and fauna according to their observations like the characteristics of plants and animals, habitats, medicinal property, livelihood uses such as food, beverage, mastication, locations or sometimes various incidents (Bachan *et al.* 2016). The study revealed nearly 443 taxa of plants within 102 families out of which, 416 are angiosperms, 2 gymnosperms, 10 pteridophytes, 2 algae and 13 fungi.

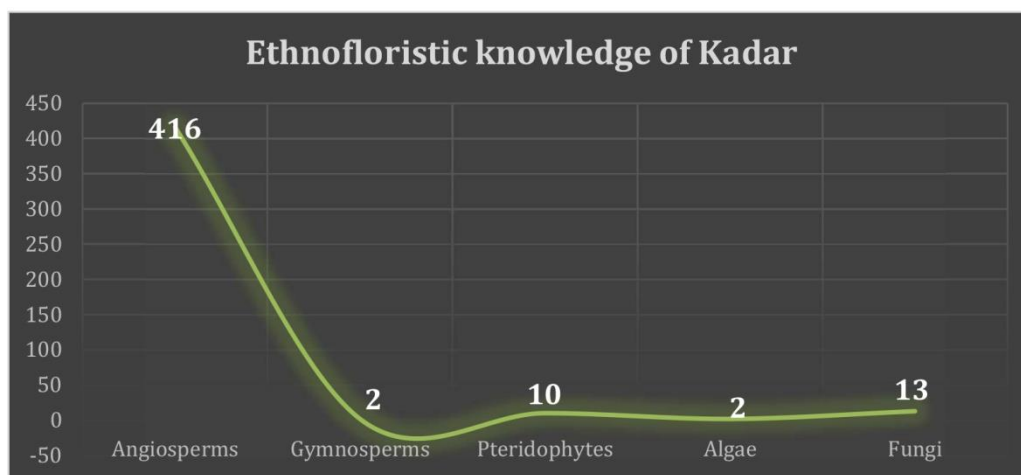


Fig. 2.5 Ethnofloristic knowledge of *Kadar*

The study revealed the ethno-nomenclature of these 443 taxa and ethno classification into various groups comparable to that of the taxonomic categories. The *Kadar* ethnic community classified the flora into 'Poonath', 'Thaaka', 'Paayaru', 'Kumin', and 'Pasuru' according to their observations. They termed Angiosperms as 'Poonath', Pteridophytes as 'Thaaka', Algae as 'Payaru', Fungi as 'Kumin', and Lichen as 'Pasuru'. They further classified the plants according to their life forms or habits such as trees, shrubs, herbs, climbers, tubers, leafy vegetables. The term 'Kodi' represents the climber; for example, *Parsonsia inodora* called 'Peenarikodi', *Spatholobus parviflorus* called 'Okirakodi'. The tubers have a unique term 'Thettam', some of the examples are *Dioscorea alata* called 'Nerathettam', *Dioscorea hispida* called 'Thalithettam' or 'Vennithettam'. The leafy vegetable group is generally called 'Adaak' for example *Adenia hondala* called 'Kannanadaaku' and *Piper umbellatum* called 'Thiriyadaaku'. The *Kadars* have a more accurate ethnic plant classification system and could be due to their rich ethnic knowledge of plants and the forest ecosystem. Some of the examples are the *Ficus travancorica*, which is a climber in the genus. They identified the plant as *Ficus* genus and the genus has a unique terminology for them that is 'Maravu'. This plant they used for 'Vil' (Bow) making so they called 'Vilmaravu'. The *Ficus nervosa* normally appears like a non-fig tree with dark coloured bark and the *Kadar* identify it as a Fig tree and termed it as 'Karimaravu'. The genus *Mesua* they called 'Naavu' or 'Naangu' because of the leaf structure like a tongue. The Lauraceae family members of plants have a unique terminology 'Chevukodi' except for the cinnamon species. The *Kadar* ethnic group has some terminologies based on colour. The *Beta vulgaris* is the best example of this. The reddish colour of the *Beta vulgaris* is the reason for naming 'Chorathettam', which means blood-coloured tuber.



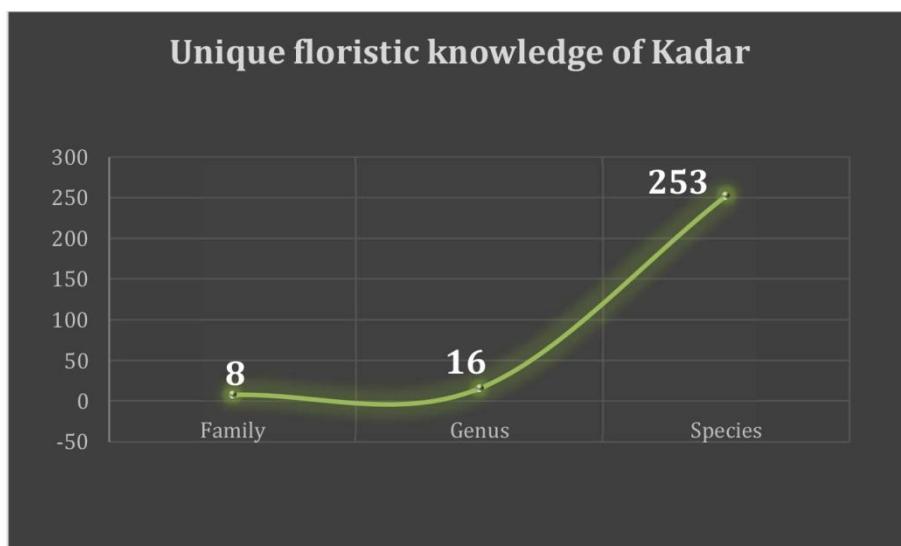


Fig. 2.6 Unique floristic knowledge of *Kadar* for family, genus and species

The *Kadar* dialect and terminologies are more of their own and unique compared with that of Malayalam and Tamil regional languages they use. The community has unique ethnic terminologies for species, genus, and families. Among Angiosperms *Kadar* has 227 unique names, one from gymnosperms, 13 from fungi, 10 from pteridophytes, and two from algae. They have identified 27 unique terminologies for different genus and eight terminologies for different families.

Table 2.1 Unique terminologies for flora by *Kadar* ethnic community.

Sl. No.	Name of the plant	IUCN status	Endemism	Ethnofloristic of <i>Kadar</i>	Ethnofloristic unique to <i>Kadar</i>
	<b>Angiosperms</b>				
	<b>Acanthaceae</b>				
1	<i>Andrographis elongata</i> (Vahl) T. Anderson	NE	Endemic to Western Ghats		Changilikurinji
2	<i>Andrographis paniculata</i> (Burm.f.) Nees	LC			Changilikurinji
3	<i>Barleria courtallica</i> Nees		Endemic to Western Ghats	Kurinji	
4	<i>Dicliptera cuneata</i> Nees	NE		Kurinji	
5	<i>Dicliptera baphica</i> Nees	NE		Kurinji	

6	<i>Dicliptera paniculata</i> (Forssk.) I.Darbysh.	NE		Kurinji	
7	<i>Ecbolium viride</i> (Forssk.) Alston	NE		Kurinji	
8	<i>Gymnostachyum pubescens</i> (Lam.) M.R. Almeida	NE		Kurinji	
9	<i>Strobilanthes alternata</i> (Burm.f.) Moylan ex J.R.I. Wood	LC			Chikkambuvu
10	<i>Justicia gendarussa</i> Burm.f.	NE		Vathamkolli	
11	<i>Justicia santapau</i> Bennet		Endemic to Southern Western Ghats	Kurinji	
12	<i>Phaulopsis imbricata</i> (Forssk.) Sweet.	LC		Kurinji	
13	<i>Rhinacanthus nasutus</i> (L) Kurz	NE		VellaKurinji	
14	<i>Ruellia prostrata</i> Poir.	NE		Thuppalampo tti	
15	<i>Rungia pectinata</i> (L.) Nees	NE		Kurinji	
16	<i>Rungia wightiana</i> Wall. ex Nees		Endemic to Southern Western Ghats	Kurinji	
17	<i>Strobilanthes ciliata</i> Nees		Endemic to Southern Western Ghats	Karimkurinji	
	<b>Acoraceae</b>				
18	<i>Acorus calamus</i> L.	LC		Vasambu	
	<b>Achariaceae</b>				
19	<i>Hydnocarpus alpina</i> Wight	VU		Vetti	
20	<i>Hydnocarpus macrocarpa</i> (Bedd.) Warb.	VU	Endemic to Western Ghats	Vetti	
21	<i>Hydnocarpus pentandrus</i> (Buch.-Ham.) Oken	VU	Endemic to Western Ghats	Vetti	
	<b>Amaranthaceae</b>				
22	<i>Achyranthes aspera</i> L.	NE			Uruva chedi
23	<i>Achyranthes aspera</i> var. <i>porphyristachya</i> (Wall. ex	NE			Uruva chedi

	Moq.) Hook.f.				
24	<i>Achyranthes aspera</i> var. <i>pubescens</i> (Moq.) M.Gómez	NE			Uruva chedi
25	<i>Alternanthera sessilis</i> (L.) R.Br. ex DC.	LC			Ponnankanniad aaku, Komanampeeri yadaaku
26	<i>Amaranthus hybridus</i> L.	NE			Aadak
27	<i>Amaranthus spinosus</i> L.	NE		Mullanadaak	
28	<i>Amaranthus tricolor</i> L.	NE		Mullanadak	Chethathandali
29	<i>Amaranthus viridis</i> L.	NE			Pattiaadak
30	<i>Beta vulgaris</i> L.	NE			Chorathettam
31	<i>Celosia argentea</i> L.	LC			Panna adaaku
32	<i>Cyathula prostrata</i> (L.) Blume	NE			Cheriyuruva
	<b>Anacardiaceae</b>				
33	<i>Holigarna arnottiana</i> Wall. ex Hook. f.		Endemic to Southern Western Ghats	Karimcheru	
34	<i>Holigarna beddomei</i> Hook.f.	EN			Vattilacheru
35	<i>Holigarna ferruginea</i> Marchand		Endemic to Western Ghats	cheru	
36	<i>Holigarna grahamii</i> (Wight) Kurz	VU	Endemic to Western Ghats		Vattilacheru
37	<i>Lannea coromandelica</i> (Houtt) Merr.	LC		Karilavu	
38	<i>Mangifera indica</i> L.	DD		Aadaavi manga/ Mangamaram / Kattumoochi	
39	<i>Semecarpus travancoricus</i> Bedd.	NE	Endemic to Southern Western Ghats		Vattilacheru
40	<i>Solenocarpus indica</i> Wight & Arn.	VU	Endemic to Southern Western Ghats		Ambekaayi, Molagarasi

41	<i>Spondias pinnata</i> (L.f.) Kurz.	NE		Ambazham	
	<b>Ancistrocladaceae</b>				
42	<i>Ancistrocladus heyneanus</i> Wall. ex J.Graham	NE			Choolanchapp u
	<b>Annonaceae</b>				
43	<i>Desmos viridiflorus</i> Saff.	EN	Endemic to Southern Western Ghats		Paak
44	<i>Meiogyne pannosa</i> (Dalzell) J. Sinclair		Endemic to Western Ghats		Vayalachennar i
45	<i>Desmos ramarowii</i> (Dunn) D.Das		Endemic to Southern Western Ghats		Kiyathiyolumb
46	<i>Milusa tomentosa</i> (Roxb.) Finet & Gagnep.	NE			Nedunaru
47	<i>Monoon coffeoides</i> (Thwaites ex Hook. f. & Thomson) B. Xue & R. M. K.Saunders	NE		Nedunaru	
48	<i>Monoon fragrans</i> (Dalzell) B. Xue & R. M. K. Saunders	NE		Nedunaru	
	<b>Apiaceae</b>				
49	<i>Centella asiatica</i> (L.) Urb.	LC			Vallaraaadak / Kudukkanadaa ku
50	<i>Eryngium foetidum</i> L.	NE			Aanamalli
51	<i>Peucedanum anamallayense</i> C. B. Clarke	NE			Kuntilamalli
	<b>Apocynaceae</b>				
52	<i>Alstonia scholaris</i> (L.) R. Br.	LC		Ezhilumpala/ Paala	
53	<i>Calotropis gigantea</i> (L.) Dryand.	NE		Erukkila	
54	<i>Chilocarpus denudatus</i> Blume	NE			Perumkuruthan
55	<i>Chonemorpha fragrans</i> (Moon) Alston	NE		Perumkurum ba	
56	<i>Decalepis hamiltonii</i> Wight	EN		Magaalikizha	

	& Arn.			ngu	
57	<i>Hemidesmus indicus</i> (L.) R. Br.	NE			Nannaniveru
58	<i>Holarrhena pubescens</i> Wall. ex G.Don	LC			Karulapaala
59	<i>Cynanchum annularium</i> (Roxb.) Liede & Khanum	NE		Paaladaaku	
60	<i>Gymnema inodorum</i> (Lour.) Decne.	NE		Peenarikodi	
61	<i>Pergularia daemia</i> (Forssk.) Chiov.	LC		Velipparuthi	
62	<i>Rauvolfia serpentina</i> (L.) Benth. ex Kurz	NE		Avalpori	Eayakundan
63	<i>Tabernaemontana alternifolia</i> L.	NE		Kundalapaala	
64	<i>Wrightia antidysenterica</i> (L.) R. Br.	NE			Maramb
65	<i>Wrightia arborea</i> (Dennst.) Mabb.	LC			Garudapala
66	<i>Wrightia tinctoria</i> (Roxb.) R. Br.	NE		Dhandhapaala, Thondapaala, Nelampaala	
	<b>Araceae</b>				
67	<i>Amorphophallus commutatus</i> (Schott) Engl.		Endemic to Western Ghats	Kattuchena, Kattuchenaya daaku	
68	<i>Amorphophallus paeoniifolius</i> (Dennst.) Nicolson	LC		Kattuchena, Kattuchenaya daaku	
69	<i>Anaphyllum wightii</i> Schott	NE			Keerichena
70	<i>Arisaema tortuosum</i> (Wall.) Schott	NE			Naagaanthi, Naagaraanthi
71	<i>Colocasia esculenta</i> (L.) Schott in Schott.	LC		Chembaadaak / Chembukilangu	
72	<i>Rhaphidophora pertusa</i> (Roxb.) Schott	NE			Marachembu
	<b>Araliaceae</b>				
73	<i>Hydrocotyle javanica</i> Thunb.	LC			Kaamaalacheppu

	<b>Areaceae</b>				
74	<i>Areca catechu</i> L.	NE		Paakkmaram	
75	<i>Arenga wightii</i> Griff.	VU	Endemic to Western Ghats	Pana	
76	<i>Calamus hookerianus</i> Becc.		Endemic to Western Ghats	Vallichooral	
77	<i>Calamus thwaitesii</i> Becc.	NE			Ponchi choral
78	<i>Caryota urens</i> L.	LC		Pana	
79	<i>Cocos nucifera</i> L.	NE		Thengamaram/thengu	
80	<i>Phoenix loureiroi</i> Kunth var. <i>humilis</i> (Royle ex Becc.) Barrow	LC			Cheevan
81	<i>Pinanga dicksonii</i> (Roxb.) Blume	NE		Kaattupaakkumaram	
	<b>Aristolochiaceae</b>				
82	<i>Aristolochia indica</i> L.	NE			PavattaThettam
83	<i>Thottea siliquosa</i> (Lam.) Ding Hou	NE		Alpam	
	<b>Asparagaceae</b>				
84	<i>Asparagus racemosus</i> Willd.	NE			Vilpirithi
	<b>Asteraceae</b>				
85	<i>Acmella calva</i> (DC.) R. K. Jansen	NE		Palluvedanac hedi	
86	<i>Ageratum conyzoides</i> L.	NE			Appachappa
87	<i>Chromolaena odorata</i> (L.) R. M. King & H. Rob.	NE			Chandan
88	<i>Strobocalyx arborea</i> (Buch.-Ham.) Sch. Bip.	LC			Vetilakarinta
89	<i>Cyanthillium cinereum</i> (L.) H. Rob.	NE			Pavukurunal
	<b>Begoniaceae</b>				
90	<i>Begonia floccifera</i> Bedd.	NE			Kalraangi
	<b>Bignoniaceae</b>				
91	<i>Stereospermum colais</i> (Buch.-Ham. ex Dillw.) D. L. Mabberley	NE		Pathiri	
	<b>Boraginaceae</b>				



92	<i>Cordia dichotoma</i> G. Forst.	NE			Thumbapazham
93	<i>Ehretia aquatica</i> (Lour.) Gottschling & Hilger	LC		Kallurvachi	Vettilavanchi
	<b>Burseraceae</b>				
94	<i>Canarium strictum</i> Roxb.	NE		Thelli, Thellippayin	Kannaadithelli
	<b>Cactaceae</b>				
95	<i>Opuntia dillenii</i> (Ker Gawl.) Haw.	NE			Mullukallipazham
	<b>Calophyllaceae</b>				
96	<i>Calophyllum calaba</i> L.		Endemic to Western Ghats	Cherupunna	
97	<i>Calophyllum polyanthum</i> L.	NE		Punnapain	
98	<i>Mesua ferrea</i> L.	NE		Naavu, Naangu	
99	<i>Mesua thwaitesii</i> Planch. & Triana	NE		Karimchuruli	Churangunaavu
	<b>Campanulaceae</b>				
100	<i>Lobelia nicotianifolia</i> Roth				Kattupukayila
	<b>Cannabaceae</b>				
101	<i>Aphananthe cuspidata</i> (Bl.) Planch	NE			Thondapoliyan
102	<i>Trema orientale</i> (L.) Blume	LC		Amai thali naaru	
	<b>Capparaceae</b>				
103	<i>Capparis moonii</i> Wight	NE			Arinjirakodi
104	<i>Capparis rheedii</i> DC.	VU	Endemic to Western Ghats		Chavrukka
105	<i>Capparis zeylanica</i> L.	NE			Karinhottivalli
	<b>Caricaceae</b>				
106	<i>Carica papaya</i> L.	DD			Veppasi
	<b>Celastraceae</b>				
107	<i>Lophopetalum wightianum</i> Arn.	LC		Venkotta	
	<b>Clusiaceae</b>				
108	<i>Garcinia gummi-gutta</i> (L.)	LC			Puliyotta
	<b>Combretaceae</b>				
109	<i>Getonia floribunda</i> Roxb.	NE		Pullaanikodi	

110	<i>Terminalia bellirica</i> (Gaertn.) Roxb.	NE		Thanni	
111	<i>Terminalia chebula</i> Retz.	LC		Kadukka	
112	<i>Terminalia elliptica</i> Willd.	NE		Karimaruth	
113	<i>Terminalia paniculata</i> Roth.		Endemic to peninsular India	Pillamaruthu	
	<b>Convolvulaceae</b>				
114	<i>Argyreia nervosa</i> (Burm. fil.) Bojer	NE			Onkattapazham
	<b>Cornaceae</b>				
116	<i>Alangium salviifolium</i> (L.f.) Wangerin				Elanjikodi
117	<i>Alangium hexapetalum</i> Lam.	LC			Elanjikodi
118	<i>Mastixia arborea</i> (Wight) C. B. Clarke	LC	Endemic to Western Ghats		Mattipal
	<b>Cucurbitaceae</b>				
119	<i>Citrullus colocynthis</i> (L.) Schrad.	NE			Karuvilkai
120	<i>Luffa acutangula</i> (L.) Roxb.	NE			Peaikinkayi
121	<i>Cucumis melo</i> L.	NE			Peaikinkayi
122	<i>Momordica dioica</i> Roxb. ex Willd.	NE		Kattupaval	
	<b>Cyperaceae</b>				
123	<i>Cyperus rotundus</i> L.	LC		Muthanga	
124	<i>Eleusine coracana</i> (L.) Gaertn.	NE		Kora	
	<b>Dilleniaceae</b>				
125	<i>Dillenia pentagyna</i> Roxb.	NE		Punna/ Vazhapunna	
	<b>Dioscoreaceae</b>				
126	<i>Dioscorea alata</i> L.	NE			Nerathettam
127	<i>Dioscorea bulbifera</i> L.	NE			Karrikki, Chavalu
128	<i>Dioscorea hispida</i> Dennst.	NE			Thalithettam, Vennithettam
129	<i>Dioscorea intermedia</i> Thw.	NE			Chekavan
130	<i>Dioscorea oppositifolia</i> L.	NE			Irathettam, Kanalu
131	<i>Dioscorea pentaphylla</i> L.	NE			Choriyanthettam /

					Noottathettam
132	<i>Dioscorea spicata</i> B. Heyne ex Roth	NE			Vettilathettam / Vettilakodithettam
133	<i>Dioscorea tomentosa</i> J. Koenig ex Spreng.	NE			Shjeluthettam
134	<i>Dioscorea wallichii</i> Hook. f.	LC			Ayanam / Chandanathettam / Mayavalli
	<b>Dipterocarpaceae</b>				
135	<i>Vateria indica</i> L.	VU		Vellapayin	Undapayin
136	<i>Dipterocarpus indicus</i> Bedd.	EN		Kalpain	
137	<i>Hopea parviflora</i> Bedd.	LC	Endemic to Southern Western Ghats	Thambakam	
138	<i>Hopea ponga</i> (Dennst.) Mabb.	EN	Endemic to Western Ghats		Ponk
	<b>Ebenaceae</b>				
139	<i>Diospyros assimilis</i> Bedd.		Endemic to Western Ghats	Karinthali	
140	<i>Diospyros buxifolia</i> (Blume) Hiern	NE			karimthuvara
141	<i>Diospyros ebenum</i> J.Koenig ex Retz.	DD		Karimaram	
142	<i>Diospyros thwaitesii</i> (Hiern) Bedd.	VU	Endemic to Peninsular India	Karimaram	
143	<i>Diospyros montana</i> Roxb.	NE		Vakkanamaram	
144	<i>Diospyros crumenata</i> Thwaites	EN			Valla/ Karimbudal
145	<i>Diospyros melanoxylon</i> Roxb.				Karimbvelli
147	<i>Diospyros nilagirica</i> Bedd.		Endemic to Southern Western Ghats	Karimcheru/ Karimchora	

148	<i>Diospyros paniculata</i> Dalzell	VU	Endemic to Peninsular India	Karivellala/ Karivella	
149	<i>Diospyros sylvatica</i> Roxb.			Karimaram	
	<b>Elaeocarpaceae</b>				
150	<i>Elaeocarpus munronii</i> (Wl.) Masters	NT	Endemic to Southern Western Ghats		Kullanagara
151	<i>Elaeocarpus serratus</i> L.	NE			Nagara
152	<i>Elaeocarpus tuberculatus</i> Roxb.	NE			Pauhmb
153	<i>Elaeocarpus variabilis</i> Zmarzty		Endemic to WG		Kaippanagara
	<b>Erythralaceae</b>				
154	<i>Erythralum scandens</i> Blume	LC			Pulluvallikodi
	<b>Euphorbiaceae</b>				
155	<i>Acalypha fruticosa</i> Forssk.	LC			Murithaali
156	<i>Agrostistachys borneensis</i> Becc.	LC		Kozhivalan	
157	<i>Jatropha curcas</i> L.	LC			Thonda
158	<i>Macaranga indica</i> Wight	LC		Thuyilmooki, Vatakkanni	
159	<i>Macaranga peltata</i> (Roxb.) Müll.Arg.	NE		Vatta	
160	<i>Mallotus resinusus</i> (Blanco) Merr.	NE			Karuthavellila
161	<i>Mallotus nudiflorus</i> (L.) Kulju & Welzen	LC		Naikumbil	
162	<i>Mallotus philippensis</i> (Lam.) Müll.Arg.	LC		Sindooramara m	
163	<i>Mallotus tetracoccus</i> (Roxb.) Kurz	NE			Vellala/ Porivatta
164	<i>Manihot esculenta</i> Crantz	NE		Poolakilangu	
165	<i>Paracroton pendulus</i> (Hassk.) Miq.	LC			Kozhivaalan/ Parorootan
166	<i>Paracroton pendulus</i> subsp. <i>zeylanicus</i> (Thwaites) N. P. Balakr. & Chakr.	NE			Perunkurunnan
167	<i>Ricinus communis</i> L.	NE		Kottamaram	

	<b>Fabaceae</b>				
168	<i>Senegalia caesia</i> (L.) Maslin, Seigler & Ebinger				Velleenga, Paaleenga
169	<i>Senegalia catechu</i> (L.f.) P. J. H. Hurter & Mabb.	NE		Karingali	
170	<i>Senegalia rugata</i> (Lam.) Britton & Rose	NE			Pulinchika, Pulichhi
171	<i>Senegalia torta</i> (Roxb.) Maslin, Seigler & Ebinger	NE			Choppaneenga
172	<i>Adenantha pavnina</i> L.	LC		Manjadi	
173	<i>Albizia chinensis</i> (Osbeck) Merr.	NE		Vaaka	
174	<i>Albizia lebbeck</i> (L.) Benth.	LC		Karivaaka/ Vaaka	
175	<i>Albizia odoratissima</i> (L.f.) Benth.	LC		Pulivaaka	
176	<i>Albizia procera</i> (Roxb.) Benth.	LC		Vella nama, Vella vakka	
177	<i>Bauhinia racemosa</i> Lam.	NE			Aarampuli
178	<i>Guilandina bonduc</i> L.	LC			Kalanchi, Chalinchi
179	<i>Cassia fistula</i> L.	LC			Kontamaram
180	<i>Crotalaria pallida</i> Aiton	NE			Killuki
181	<i>Dalbergia latifolia</i> Roxb.	VU		Veetti	
182	<i>Entada rheedei</i> Spreng.	NE			Theylakodi
183	<i>Erythrina subumbrans</i> (Hassk.) Merr.	NE		Murik, Muringa	
184	<i>Erythrina variegata</i> L.	LC		Mullumurikk, Muringa	
185	<i>Prioria pinnata</i> (Roxb. ex DC.) Breteler	EN	Endemic to Southern Western Ghats	Ennapine	
186	<i>Pongamia pinnata</i> (L.) Pierre	LC		Ungu, Punku	
187	<i>Mimosa pudica</i> L.	LC		Thottavaadi ,Thottasukki	
188	<i>Ormosia travancorica</i> Bedd.	NE		Malamanjadi	
189	<i>Pterocarpus marsupium</i> Roxb.	NT		Venga	Benga ,Vengachora, Vengapala

190	<i>Pueraria tuberosa</i> (Willd.) DC.	NE		Paalmuthukku	
191	<i>Senna occidentalis</i> (L.)	NE			Kolthakara
192	<i>Senna tora</i> (L.) Roxb.	NE			Thakaraadak, Chakkarathakara, Kummattithakara rayadaaku
193	<i>Sesbania grandiflora</i> (L.) Pers.	NE		Agathiaadaak	
194	<i>Spatholobus parviflorus</i> (Roxb. ex G. Don) Kuntze	LC			Okirakodi
195	<i>Tamarindus indica</i> L.	LC		Puli	
196	<i>Vigna vexillata</i> (L.) A.Rich.	NE		Avara	
197	<i>Xylia xylocarpa</i> (Roxb.) Taub.	LC		Irelu/ Irumullu/Irillimaram	
198	<i>Zornia gibbosa</i> Span.	NE		Murikooti	
	<b>Lamiaceae</b>				
199	<i>Callicarpa tomentosa</i> (L.) L.	LC		Cheruthek	
200	<i>Clerodendrum infortunatum</i> L.	NE		Pearu	
201	<i>Gmelina arborea</i> Roxb. ex Sm.	LC		Kumbil	
202	<i>Ocimum americanum</i> L.	NE		Kaattuthulasi	
203	<i>Tectona grandis</i> L.f.	NE		Thekkumaram	
204	<i>Vitex altissima</i> L.f.	NE		Myla	
205	<i>Vitex negundo</i> L.	LC		Karinechi	
	<b>Lauraceae</b>				
206	<i>Actinodaphne bourdillonii</i> Gamble		Endemic to Southern Western Ghats		Neelilachevukodi
207	<i>Actinodaphne tadulingamii</i> Gamble	NT			Chevukodi
208	<i>Actinodaphne wightiana</i> (Kuntze) Noltie	NE			Neelilachevukodi
209	<i>Alseodaphne semecarpifolia</i> Nees	NE			Cheenthaali
210	<i>Beilschmiedia gemmiflora</i> (Blume) Kosterm.	NE			Chovukodi



211	<i>Cinnamomum bejolghota</i> (Buch.-Ham.) Sweet	LC			Lavangapatta
212	<i>Cinnamomum camphora</i> (L.) J. Presl.	NE			Pulimbilaavu
213	<i>Cinnamomum sulphuratum</i> Nees	VU	Endemic to Western Ghats		Pattamaram
214	<i>Litsea beddomei</i> Hook. f.	EN			Chevukodi
215	<i>Litsea coriacea</i> (B. Heyne ex Nees) Hook. f.	NT	Endemic to Peninsular India		Chevukodi, Vellachevukodi
216	<i>Litsea floribunda</i> (Blume) Gamble	NT			Chevukodi
217	<i>Litsea lancifolia</i> Hook. f.	NT			Neelilachevukodi
218	<i>Neolitsea cassia</i> (L.) Kosterm.	NE			Chevukodi
219	<i>Neolitsea pallens</i> (D. Don) Momiy. & H. Hara	NE			Chevukodi
220	<i>Machilus glaucescens</i> (Nees) Wight	NE		Kulamavu	
221	<i>Phoebe lanceolata</i> (Nees) Nees	LC			Vinnayalichevukodi, Chiplampatta
	<b>Lecythidaceae</b>				
222	<i>Careya arborea</i> Roxb.	NE			Pekkumaram
	<b>Liliaceae</b>				
223	<i>Aloe vera</i> (L.) Burm. f.	NE		Kattarvazha	
	<b>Loganiaceae</b>				
224	<i>Strychnos wallichiana</i> Steud. ex A. DC.	NE		kanjirakodi	
225	<i>Strychnos minor</i> Dennst.	NE		Kanjirakodi	
226	<i>Strychnos nux-vomica</i> L.	NE		kanjiram	
227	<i>Strychnos potatorum</i> L. fil.	NE		Kanjiram	
228	<i>Strychnos vanprukii</i> Craib	NE		Kanjirakodi	
	<b>Lythraceae</b>				
229	<i>Lagerstroemia lanceolata</i> Wall.		Endemic to Western Ghats		Veyaavu, Vezhaavu, Beyaavu
230	<i>Lagerstroemia speciosa</i> (L.) Pers.	NE		Manimaruth	
	<b>Malvaceae</b>				
231	<i>Bombax ceiba</i> L.	LC			Elavan

232	<i>Bombax insigne</i> Wall.	NE			Kallillavu/Kundilavvu/paaraelavu
233	<i>Cieba pentandra</i> (L.) Gaertn.	NE		Poola	
234	<i>Cullenia exarillata</i> A. Robyns	NE		Karaani	
235	<i>Helicteres isora</i> L.	NE		Chenari, Kaivan	
236	<i>Sida acuta</i> Burm. f.	NE		Kurunthotti	
237	<i>Sida alnifolia</i> L.	NE		Kooraankurunthotti	
238	<i>Sida rhombifolia</i> L.	NE		Kurunthotti	
	<b>Marantaceae</b>				
239	<i>Indianthus virgatus</i> (Roxb.) Suksathan & Borchs.	NE		Vellakoova	
	<b>Meliaceae</b>				
240	<i>Aglaia edulis</i> (Roxb.) Wall.	NT		Chonakil / Chembil	
241	<i>Aglaia elaeagnoidea</i> (A. Juss.) Benth.	LC		Chembil	
242	<i>Aglaia lawii</i> (Wight)	LC		Karagil / Chembil	
243	<i>Azadirachta indica</i> A. Juss.	LC		Veppu	
244	<i>Chukrasia tabularis</i> A. Juss.	LC		Vaadayaalichembil	
245	<i>Dysoxylum malabaricum</i> Bedd. ex Hiern	EN		Vinayalichembil/ Vellakil	
246	<i>Reinwardtiodendron anamalaiense</i> (Bedd.) D. J. Mabberley	NE		Onkalvayichembil	
247	<i>Toona ciliata</i> M. Roem.	LC		Cholavembu	
	<b>Menispermaceae</b>				
248	<i>Anamirta cocculus</i> (L.) Wight & Arn.	NE		Pollakaya	
249	<i>Coscinium fenestratum</i> (Gaertn.) Colebr.	DD		Maramanjalkodi	
250	<i>Cyclea peltata</i> Hook. f. & Thoms.	NE		Paadaveru/ Padakiyangu	
251	<i>Diploclisia glaucescens</i> (Bl.) Diels	NE		Chilanthikizhangu	
	<b>Moraceae</b>				
252	<i>Artocarpus gomezianus</i>	NE		Paakmaram	

253	<i>Artocarpus heterophyllus</i> Lam.	NE		Chakkamaram/ plaavu	
254	<i>Artocarpus hirsutus</i> Lam.	LC		Ayanni	
255	<i>Artocarpus altilis</i> (Parkinson) Fosberg	NE		Kadachakka	
256	<i>Ficus amplissima</i> J. E. Smith in Rees	NE			Kuntilamaraavu
257	<i>Ficus anamalayana</i> Sudhakar & G.V.S. Murthy	NE			Kuntilamaravu
258	<i>Ficus arnottiana</i> (Miq.) Miq.	NE			Kuntilamaravu
259	<i>Ficus beddomei</i> King	NE			Adaavimaravu / Cholamaraavu
260	<i>Ficus benghalensis</i> L.	NE			Kallichi
261	<i>Ficus callosa</i> Willd.	NE			Velmaravu
262	<i>Ficus costata</i> Aiton	NE			Velmaravu
263	<i>Ficus dalhousiae</i> (Miq.) Miq.	NE			Kuntilamaravu
264	<i>Ficus drupacea</i> Thunb.	LC			Thavittal
265	<i>Ficus exasperata</i> Vahl	LC			Paaruvaaan
266	<i>Ficus heterophilla</i> L. f.	NE			Thondi
267	<i>Ficus hispida</i> L. f.	LC			Thondi
268	<i>Ficus microcarpa</i> L. f.	LC			Kannayanimaravu
269	<i>Ficus mollis</i> Vahl	NE			Kuntilamaravu
270	<i>Ficus nervosa</i> Roth	LC			Chola maraavu
271	<i>Ficus racemosa</i> L.	LC		Athi	Maraavu
272	<i>Ficus religiosa</i> L.	NE			Maraavu
273	<i>Ficus travancorica</i> king	NE			Vilmaraavu
274	<i>Ficus superba</i> Miq.	NE			Maraavu
275	<i>Ficus talbotii</i> King	NE			Maraavu
276	<i>Ficus tinctoria</i> G. Forst.				Paraveeti
277	<i>Ficus tsjakela</i> Burm.f.	NE		Chela	
278	<i>Ficus virens</i> W.T. Aiton	LC			Cholamaraavu
	<b>Moringaceae</b>				
279	<i>Moringa concanensis</i> Nimmo	NE			Vedamkurna
280	<i>Moringa oleifera</i> Lam.	LC		Muringa	
	<b>Musaceae</b>				
281	<i>Musa paradisiaca</i> L.	NE		Vaazha	
282	<i>Ensete superbum</i> (Roxb.)		Endemic to		Kuntavaazha

	Cheesman		Peninsular India		
	<b>Myristicaceae</b>				
283	<i>Myristica malabarica</i> Lam.	VU		Pathiri	
284	<i>Knema attenuata</i> (Wall. ex Hook. f. & Thomson) Warb.	LC			Chorapathiri
285	<i>Myristica beddomei</i> King	NE		Pathiripoo	
286	<i>Gymnacranthera canarica</i> (Bedd. ex King) Warb.	VU			Undapathiri
	<b>Myrtaceae</b>				
287	<i>Eucalyptus globulus</i> Labill.	LC		Eucali	
288	<i>Psidium guajava</i> L.	LC		KoyyaKaayi/ Pera	
289	<i>Syzygium aqueum</i> (Burm.f.) Alston	NE			Javvakoyya
290	<i>Syzygium caryophyllatum</i> (L.) Alston	EN			Oomajaral
291	<i>Syzygium cumini</i> (L.) Skeels.	LC		Nara	
292	<i>Syzygium gardneri</i> Thwaites	NE			Arinara
293	<i>Syzygium grande</i> (Wight) Walp.		Endemic to Southern WG		Kallunara
294	<i>Syzygium laetum</i> ( Buch - Ham) Gandhi	NE		Kattuchamba	Manjannara
295	<i>Syzygium lanceolatum</i> (Lam.) Wt. & Arn.	NE		Nara	
296	<i>Syzygium mundagam</i> (Bourd.) Chitra	NE		Nara	
297	<i>Syzygium munronii</i> (Wt.) Chandrab.	NE			Choppanara
	<b>Oleaceae</b>				
298	<i>Chionanthus mala-elengi</i> (Dennst.) P. S. Green	NE		Kallelanji/Ma laelengi/ Kalladala	
299	<i>Myxopyrum smilacifolium</i> (Wall.) Blume	NE		Chathuramull a/ Chathurakkod i	
300	<i>Olea dioica</i> Roxb.	NE			Korappa
	<b>Orchidaceae</b>				
301	<i>Acampe praemorsa</i> (Roxb.) Blatt.	NE			Marapanna

302	<i>Nervilia concolor</i> (Blume) Schltr.	NE			Kalrangi
303	<i>Vanda thwaitesii</i> Hook. f.	NE			Kallola, Marayola
	<b>Oxalidaceae</b>				
304	<i>Biophytum sensitivum</i> (L.) DC.	NE			Chirikkampoo vu
305	<i>Oxalis corniculata</i> L.	NE			Puliyadaaku
	<b>Passifloraceae</b>				
306	<i>Adenia hondala</i> (Gaertn.) de Wilde	NE			Kannanadaaku
307	<i>Passiflora edulis</i> Sims	NE			Mudichipalam
	<b>Phyllanthaceae</b>				
308	<i>Antidesma acidum</i> Retz.	LC			Kambilipulipaz ham
309	<i>Antidesma montanum</i> Blume	LC			Puliyaranjan
310	<i>Aporosa acuminata</i> Thwaites	NE			Kallidala
311	<i>Aporosa cardiosperma</i> (Gaertn.) Merr.	VU			Kallidala
312	<i>Baccaurea courtallensis</i> (Wight) Müll.Arg.		Endemic to Peninsular India		Oovathan
313	<i>Bischofia javanica</i> Blume	LC		Cholavenga	
314	<i>Bridelia retusa</i> (L.) A.Juss.	LC		Mulluvenga	
315	<i>Phyllanthus amarus</i> Schum. & Thonn.	NE		Keezharnelli	
316	<i>Glochidion ellipticum</i> Wight	LC			Neerola
317	<i>Phyllanthus emblica</i> L.	LC		Nellika	
318	<i>Phyllanthus rheedei</i> Wight	NE		Keezharnelli	
	<b>Piperaceae</b>				
319	<i>Piper umbellatum</i> L.	NE			Thiriyadaaku
320	<i>Piper barberi</i> Gamble.	EN		Kattukurumulak	
321	<i>Piper betle</i> L.	NE		Vettila	
322	<i>Piper longum</i> L.	NE		Thuppali/Thuppili/Thippili	
323	<i>Piper peepuloides</i> Roxb.	NE		Kattukurumulak	
324	<i>Piper nigrum</i> L.	NE		Kurumulak	

	<b>Pittosporaceae</b>				
325	<i>Pittosporum dasycaulon</i> Miq.	NE		Kasumaram	
326	<i>Pittosporum neelgherrense</i> Wight & Arn.	NE		Analivegam	
	<b>Poaceae</b>				
327	<i>Bambusa bambos</i> (L.)	NE		Mula	
328	<i>Cymbopogon citratus</i> (DC.) Stapf	NE		Thailappullu	
329	<i>Dendrocalamus strictus</i> (Roxb.)	NE		Mula	
330	<i>Ochlandra scriptoria</i> (Dennst.) C. E. C. Fisch.	NE			Veyi
331	<i>Ochlandra setigiera</i> Gamble	NE			Velleetta
332	<i>Ochlandra travancorica</i> (Bedd.) Benth	NE		Kaareetta	
333	<i>Pseudoxytenanthera</i> <i>bourdillonii</i> (Gamble) H. B. Naithani	NE		Arayambu	
334	<i>Schizostachyum beddomei</i> (C. E. C. Fisch.) R. B. Majumdar	NE			Noonjooru
335	<i>Setaria italica</i> (L.) P. Beauv.	NE		Thina	
336	<i>Sorghum bicolor</i> (L.) Moench	NE		Poricholam	
337	<i>Zea mays</i> L.	LC		Makkachola m	
	<b>Polygalaceae</b>				
338	<i>Xanthophyllum flavescens</i> Roxb.	NE			Paikka
	<b>Polygonaceae</b>				
339	<i>Persicaria chinensis</i> (L.) H. Gross	NE			Odimadavalina yadaaku
	<b>Portulacaceae</b>				
340	<i>Portulaca oleracea</i> L.	LC			Pollathandanad aaku
	<b>Putranjivaceae</b>				
341	<i>Drypetes malabarica</i> (Bedd.) Airy Shaw	NE			Pinepothi
342	<i>Drypetes venusta</i> (Wight) Pax & K. Hoffm	NE		Palgani	

343	<i>Drypetes oblongifolia</i> (Bedd.) Airy Shaw	NE		Mallampayin/ Valla	
	<b>Ranunculaceae</b>				
344	<i>Clematis zeylanica</i> (L.) Poir.	NE			Eruppakodi, Vathakodi, Chalikkodi
	<b>Rhamnaceae</b>				
345	<i>Ziziphus oenoplia</i> (L.) Miller	NE		Kotta	
346	<i>Ziziphus rugosa</i> Lam.	NE		Kotta	
	<b>Rubiaceae</b>				
347	<i>Adina cordifolia</i> (Roxb.) Brandis	NE			Kudala / Chudala
348	<i>Canthium rheedei</i> DC.	NE			Karakkay
349	<i>Coffea arabica</i> L.	EN		Kappi	
350	<i>Hymenodictyon orixense</i> (Roxb.) Mabb.	NE		Chakkathekk	
351	<i>Melicope lunu-ankenda</i> (Gaertn.) T.G. Hartley	LC		Nasakam	
352	<i>Mitragyna parvifolia</i> (Roxb.) Korth.	NE			Chudalamaram
353	<i>Mussaenda frondosa</i> L.	NE		Vellila/ Vellimayithal li	
354	<i>Neolamarckia cadamba</i> (Roxb.) Bosser	NE		Aattuthek/ Kodavara	
355	<i>Ophiorrhiza mungos</i> L.	NE			Keeripacha
356	<i>Psychotria anamallayana</i> Bedd.	NE			Kurinji
357	<i>Psydrax dicoccos</i> Gaertn.	VU			Mullankara
358	<i>Rubia cordifolia</i> L.	NE			Murikodi
	<b>Rutaceae</b>				
359	<i>Aegle marmelos</i> (L.) Correa	NE		Koovalam	
360	<i>Glycosmis pentaphylla</i> (Retz.) DC.	LC		Panal / Pana	
361	<i>Naringi crenulata</i> (Roxb.) Nicolson	NE		Naragam	
362	<i>Zanthoxylum asiaticum</i> (L.) Appelhans, Groppo & J.Wen	NE			Puliyorumullu
	<b>Salicaceae</b>				
363	<i>Flacourtia jangomas</i> (Lour.) Raeusch	NE			Charalpazham



364	<i>Flacourtia montana</i> J. Graham	NE			Chaliru
	<b>Sapindaceae</b>				
365	<i>Cardiospermum halicacabum</i> L.	LC			Modakkittanaadaak
366	<i>Harpullia arborea</i> (Blanco) Radlk.	LC		Puzhukkolli/ Chittilamadaku	
367	<i>Lepisanthes tetraphylla</i> (Vahl) Radlk.	LC		Poovam	Kalpoovathi
368	<i>Otonophelium stipulaceum</i> (Bedd.) Radlk.	LC		Poovam	
369	<i>Sapindus trifoliatum</i> L.	NE		Ullurinji, Urunchikaya, Poochakotta	
370	<i>Schleichera oleosa</i> (Lour.) Oken	LC			Kuntilapoovaa n
	<b>Sapotaceae</b>				
371	<i>Donella lanceolata</i> (Blume) Aubrév.	LC			Noolanga
372	<i>Isonandra perrottetiana</i> A.DC.	NE		Karimbala	
373	<i>Madhuca neriifolia</i> (Moon) H.J.Lam	LC		Attilippa	
374	<i>Mimusops elengi</i> L.	LC		Ilaanchi, Ilanchi	
375	<i>Palaquium ellipticum</i> (Dalzell) Baill.	LC		Paali	
376	<i>Palaquium ravii</i> Sasidh. & Vink	EN		Paali	
	<b>Simaroubaceae</b>				
377	<i>Ailanthus triphysa</i> (Dennst.) Alston	NE		Mattipal	
	<b>Solanaceae</b>				
378	<i>Datura metel</i> L.	NE			Thumbachedi
379	<i>Nicotiana tabacum</i> L.	NE		Pokala	
380	<i>Solanum aculeatissimum</i> Jacq.	NE			Kaipachunda
381	<i>Solanum americanum</i> Mill.	NE		Chikkuttiadaaku	Kaataankutiadaaku, Kakayadaaku
382	<i>Solanum nigrum</i> L.	NE		Chikkuttiadaaku /	Kaataankutiadaaku,

				Kaataankutia daaku / Kakayadaaku	Kakayadaaku
383	<i>Solanum torvum</i> Sw.	NE		Chunda	
384	<i>Solanum virginianum</i> L.	NE			Pechunda
	<b>Staphylaceae</b>				
385	<i>Turpinia malabarica</i> Gamble	NE			Kambilimaram
	<b>Sterculiaceae</b>				
386	<i>Firmiana colorata</i> (Roxb.) R. Br.	NE		Kadaala/ Malamparathi	
387	<i>Heritiera papilio</i> Bedd.	NE			Kuraavumaram
388	<i>Pterospermum reticulatum</i> Wight & Arn.	VU		Malayuram	
389	<i>Sterculia foetida</i> L.	NE			Vellathondi
390	<i>Sterculia guttata</i> Roxb.	NE		Thondi, Peenari	
391	<i>Sterculia villosa</i> Roxb.	NE		Aananaaru, Vakkanaaru	
	<b>Symplocaceae</b>				
392	<i>Symplocos acuminata</i> (Blume) Miq.	NE			Pachilamaram
393	<i>Symplocos macrophylla</i> subsp. <i>rosea</i> (Bedd.) Noot.	NE		Malankuravi	
	<b>Tetramelaceae</b>				
394	<i>Tetrameles nudiflora</i> R. Br.	LC		Cheeni	
	<b>Tiliaceae</b>				
395	<i>Grewia abutilifolia</i> W. Vent ex Juss.	LC		Chadachi	
396	<i>Grewia tiliifolia</i> Vahl	NE		Chadachi / Unnam	
	<b>Ulmaceae</b>				
397	<i>Holoptelea integrifolia</i> Planch.	NE		Aaval	
	<b>Urticaceae</b>				
398	<i>Debregeasia longifolia</i> (Burm.f.) Wedd.	LC			Kanavanchi
399	<i>Dendrocnide sinuata</i> (Bl.) Chew	NE			Aanathondi / Piyang / Chudukolu
400	<i>Laportea interrupta</i> (L.) Chew.	NE			Thuvaadaaku

401	<i>Oreocnide integrifolia</i> (Gaud.) Miq.	NE			Kanavanchi
	<b>Verbenaceae</b>				
402	<i>Clerodendrum viscosum</i> Vent.	NE			Perukinthali
403	<i>Lantana camara</i> L.	NE		Aripoo	
	<b>Vitaceae</b>				
404	<i>Ampelocissus latifolia</i> (Roxb.) Planch.	NE		Karantha	
405	<i>Cissus quadrangularis</i> L.	NE			Pirasal
406	<i>Leea asiatica</i> (L.) Ridsdale	NE			Njalvu
407	<i>Leea indica</i> (Burm. f.) Merr.	LC			Aananjalvu
	<b>Zingiberaceae</b>				
408	<i>Curcuma aromatica</i> Salisb.	NE		Manjakoova	
409	<i>Curcuma caesia</i> Roxb.	NE		Karimkoova	
410	<i>Curcuma longa</i> L.	DD		Manjal	
411	<i>Curcuma neilgherensis</i> Wight.	NE		Vellakoova	
412	<i>Elettaria cardamomum</i> (L.) Maton	NE		Elam	
413	<i>Hedychium coronarium</i> J. Koenig	DD		Aanachukku	
414	<i>Kaempferia galanga</i> L.	DD			Poolaankiyaan g
415	<i>Zingiber officinale</i> Rose.	DD		Inji	
416	<i>Zingiber zerumbet</i> (L.) J.E Smith	DD		Kattinji	
	<b>Gymnosperms</b>				
	<b>Cycadaceae</b>				
1	<i>Cycas circinalis</i> L.	EN		Eenthadaaku	
	<b>Gnetaceae</b>				
2	<i>Gnetum edule</i> (Willd.) Blume	NE			Kuntikodi, Oolantha
	<b>Pteridophytes</b>				
	<b>Angiopteridaceae</b>				
1	<i>Angiopteris</i> sp.				KidangAadaak
	<b>Aspliniaceae</b>				
2	<i>Asplenium phyllitidis</i> D. Don	NE			Marappanna

	<b>Athyriaceae</b>				
3	<i>Diplazium esculentum</i> (Retz.) Sw.	LC			Suruliadaaku
	<b>Polypodiaceae</b>				
4	<i>Aglaomorpha quercifolia</i> (L.) Hovenkamp & S. Linds.	NE			Ulayalavalli, Kellola
5	<i>Drynaria quercifolia</i> (L.) J. Sm.	NE			Ulayalavalli
6	<i>Lemmaphyllum microphyllum</i> C. Presl	NE			Kodipanna
7	<i>Pyrrhosia lanceolata</i> (L.) Farw.	NE			Thiriyar
	<b>Pteridaceae</b>				
8	<i>Actiniopteris radiata</i> (Koenig ex Sw.) Link	NE			Kallupana
9	<i>Adiantum philippense</i> L.	NE			Kathirpanna
10	<i>Parahemionitis cordata</i> (Roxb. ex Hook. & Grev.) Fraser-Jenkins	NE			Elichevi
	<b>Algae (Paayaru)</b>				
	<b>Chlorophyceae</b>				
1	<i>Chlorella</i> sp.				Thannipaayaru
2	<i>Chlorella</i> sp.				Verkaay
	<b>Fungi</b>				
	<b>Auriculariaceae</b>				
1	<i>Auricularia auricula-judae</i> (Bull.) J. Schröt.				Kathu kumin
	<b>Boletaceae</b>				
2	<i>Boletus edulis</i> Bull.	LC			Karadiyeeralku min
	<b>Ganodermataceae</b>				
3	<i>Ganoderma lucidum</i> (Curtis) P.	NE			Marakumin
	<b>Lyophyllaceae</b>				
4	<i>Termitomyces clypeatus</i> R. Heim	NE			Choondukumi n
5	<i>Termitomyces striatus</i> (Beeli) R. Heim	NE			Vavuladikumi n
6	<i>Termitomyces heimii</i> Natarajan	NE			Puttakumin
7	<i>Termitomyces indicus</i> Natarajan	NE			Vishakumin

8	<i>Termitomyces microcarpus</i> (Berk and Br.) Helim.	NE			Arikumin
	<b>Phallacea</b>				
9	<i>Phallus indusiatus</i> Vent.	NE			Pambukumin
	<b>Pleurotaceae</b>				
10	<i>Pleurotus ostreatus</i> (Jacq.) P. Kumm.	NE			Marakkumin
11	<i>Plurotus tuber regium</i> (Fr.) Singer	NE			Venjikumin
	<b>Pluteaceae</b>				
12	<i>Volvariella bombycine</i> (Schaeff.) Singer	NE			Nurukkanikum in

Table 2.2 Ethnofloristic nomenclature for Genera unique to *Kadar*

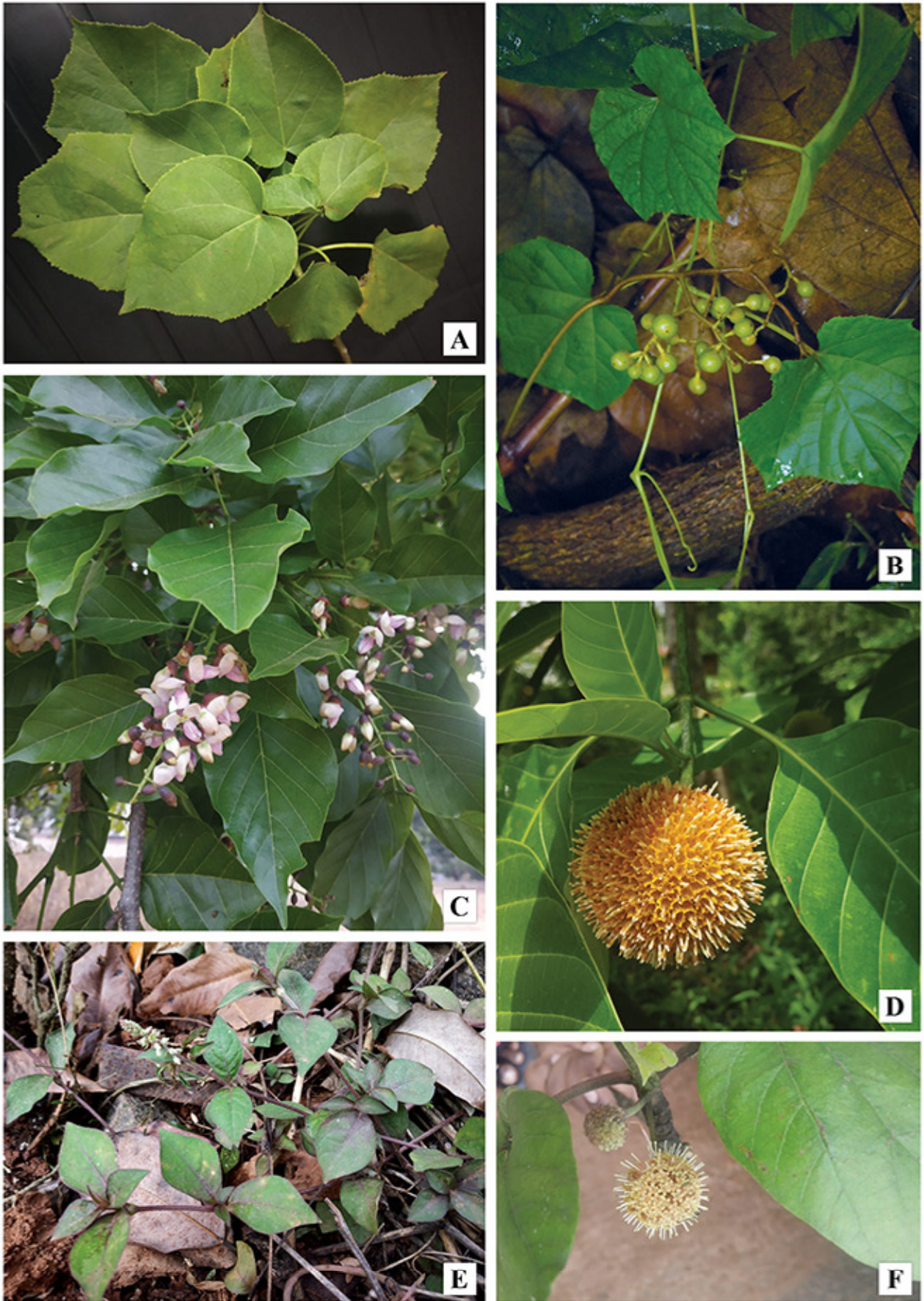
Sl.No.	Genera	Terminology of <i>Kadar</i>
1	<i>Hydnocarpus</i>	Vetti
2	<i>Achyranthes</i>	Uruva chedi
3	<i>Amaranthus</i>	Adaaku
4	<i>Monoon</i>	Nedunaru
5	<i>Calophyllum</i>	Punna
6	<i>Alangium</i>	Elanjikodi
7	<i>Luffa</i>	Peekinkayi
8	<i>Acacia</i>	Eenga
9	<i>Albizia</i>	Vaaka
10	<i>Senna</i>	Thakarayadaaku
11	<i>Artocarpus</i>	Chakkamaram
12	<i>Ficus</i>	Maraavu
13	<i>Syzygium</i>	Naara
14	<i>Aporosa</i>	Kallidala

15	<i>Flacourtia</i>	Charalpazham
16	<i>Leea</i>	Njalvu

Table 2.3 Ethnofloristic nomenclature for Families unique to *Kadar*

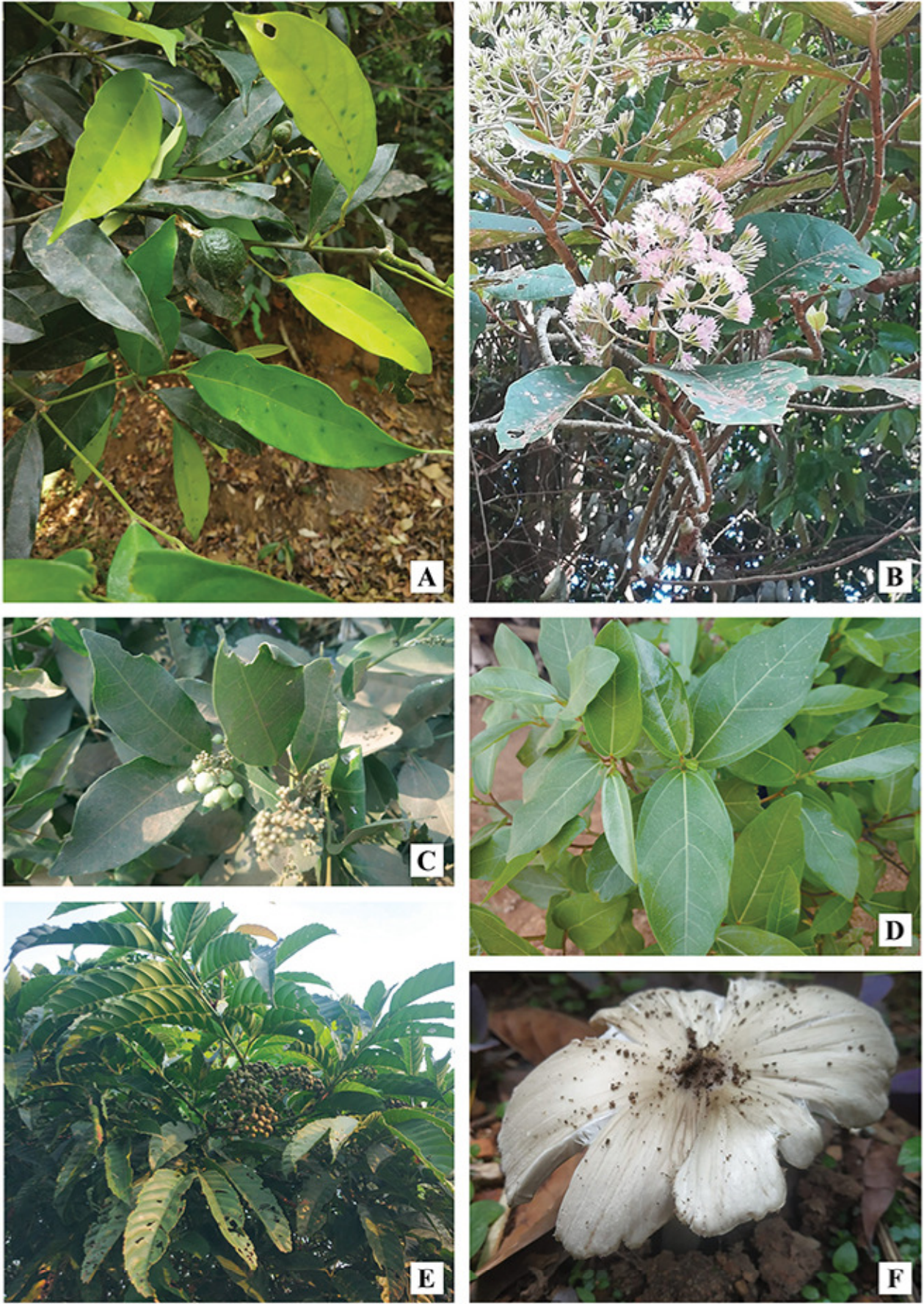
<b>Sl.No.</b>	<b>Family</b>	<b>Terminology of <i>Kadar</i></b>
1	Acanthaceae	Kurinji
2	Dioscoreaceae	Thettam
3	Ebenaceae	Karimaram
4	Elaeocarpaceae	Nakara
5	Lauraceae	Chevukodi
6	Loganiaceae	Kaanjiram
7	Meliaceae	Chembil
8	Myristicaceae	Pathiri





**Fig. 2.7 Ethno-florestic diversity of Kadar :** A. 'Cheeni' (*Tetrameles nudiflora*), B. 'Karantha' (*Ampelocissus latifolia*), C. 'Ungu, Punku' (*Pongamia pinnata*), D. 'Aattuthek, Kodavara' (*Neolamarckia cadamba*), E. 'Cheriyuruva' (*Cyathula prostrata*), F. 'Kudala, Chudala' (*Adina cordifolia*).





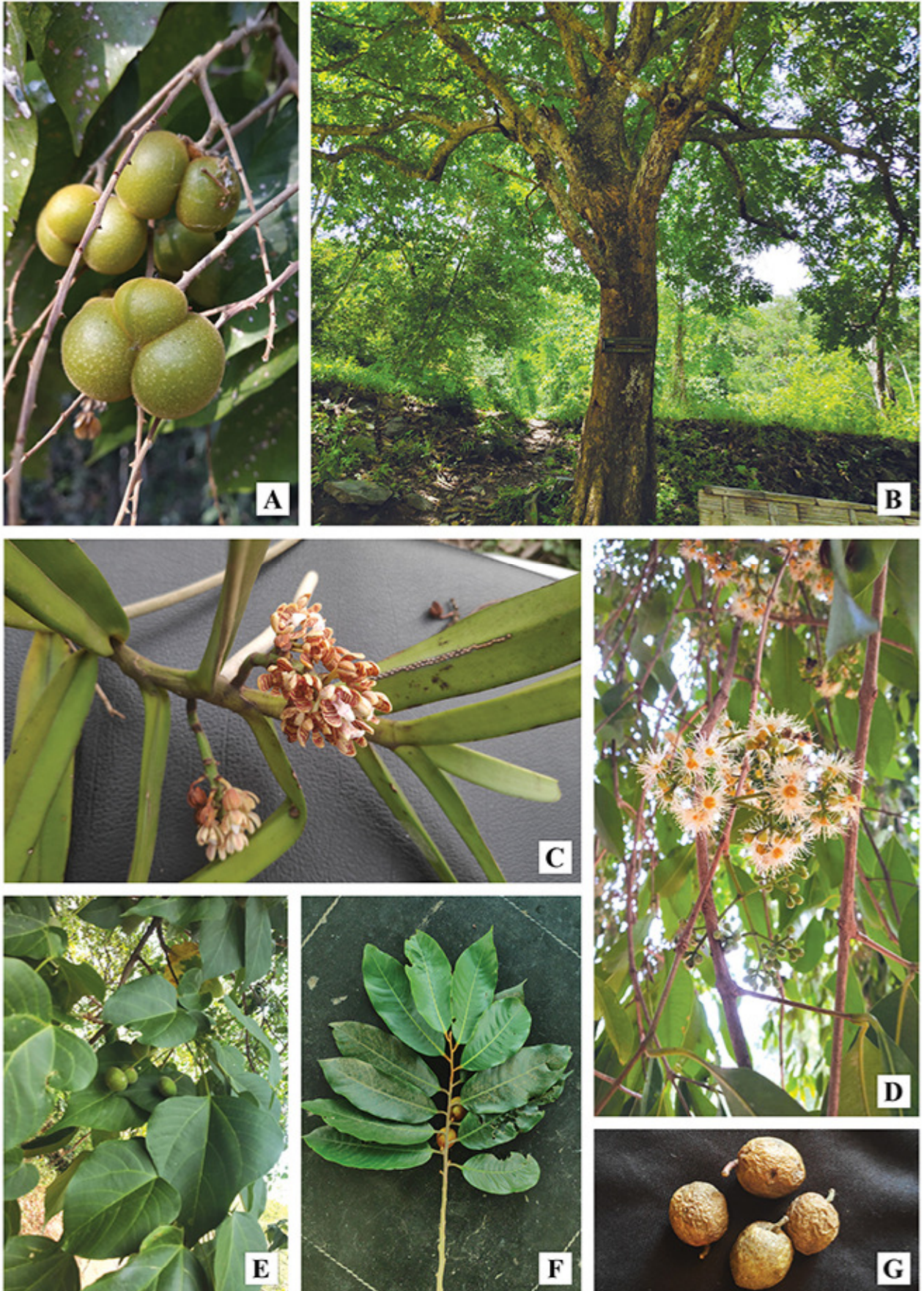
**Fig. 2.8 Ethno-florestic diversity of Kadar :** A. 'Paikka' (*Xanthophyllum flavescens*), B. 'Vettilakarantha' (*Strobocalyx arborea*), C. 'Paana' (*Glycosmis pentaphylla*), D. 'Athi' (*Ficus racemosa*), E. 'Aananjalvu' (*Leea indica*), F. 'Choondu kumin' (*Termitomyces clypeatus*).





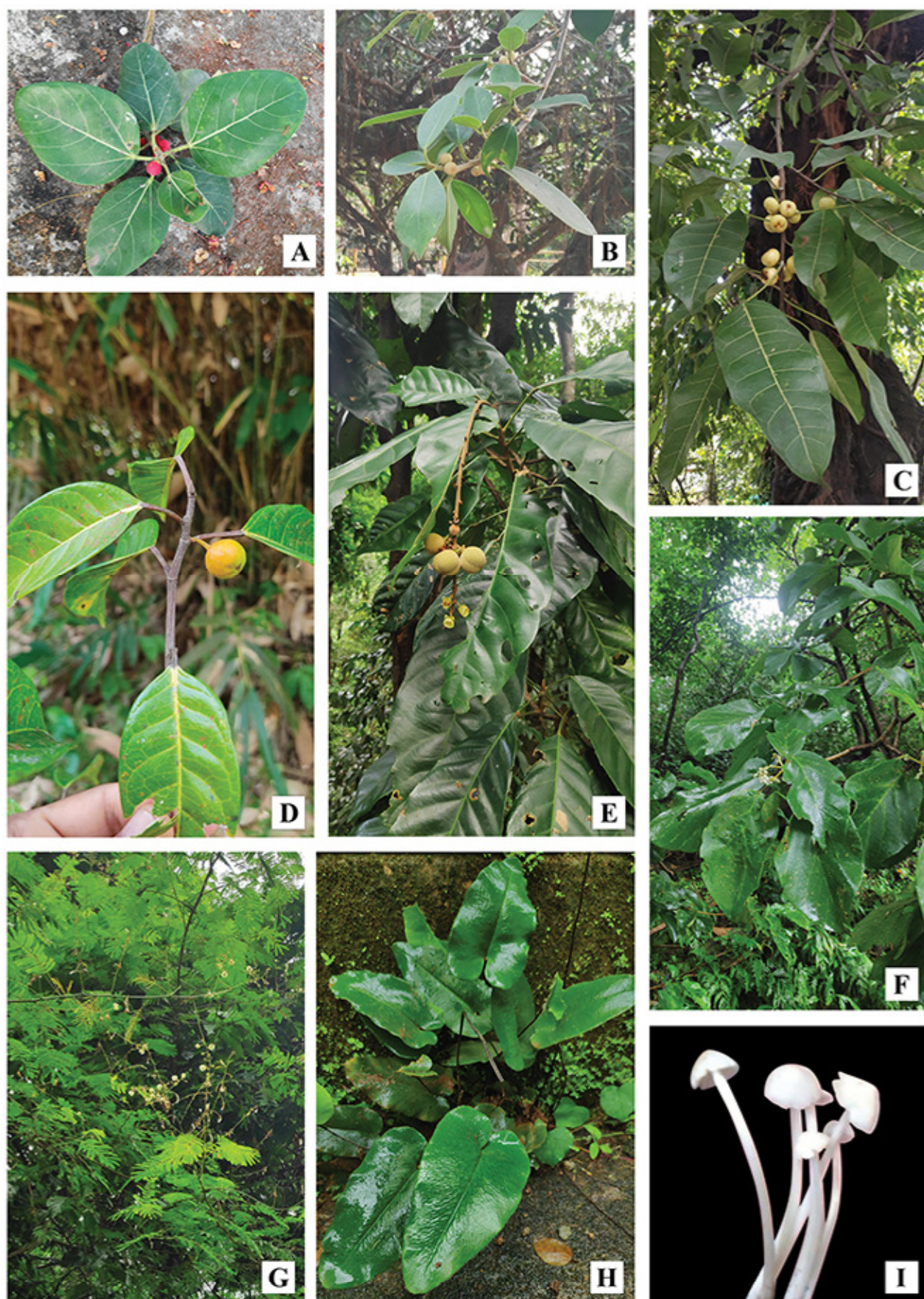
**Fig. 2.9 Ethno-florestic diversity of Kadar :** A. 'Alpam' (*Thottea siliquosa*), B. 'Erukku' (*Calotropis gigantea*), C. 'Thippali' (*Piper longum*), D. 'Kuntavaazha' (*Ensete superbum*), E. 'Kattupukayila' (*Lobelia nicotianifolia*).





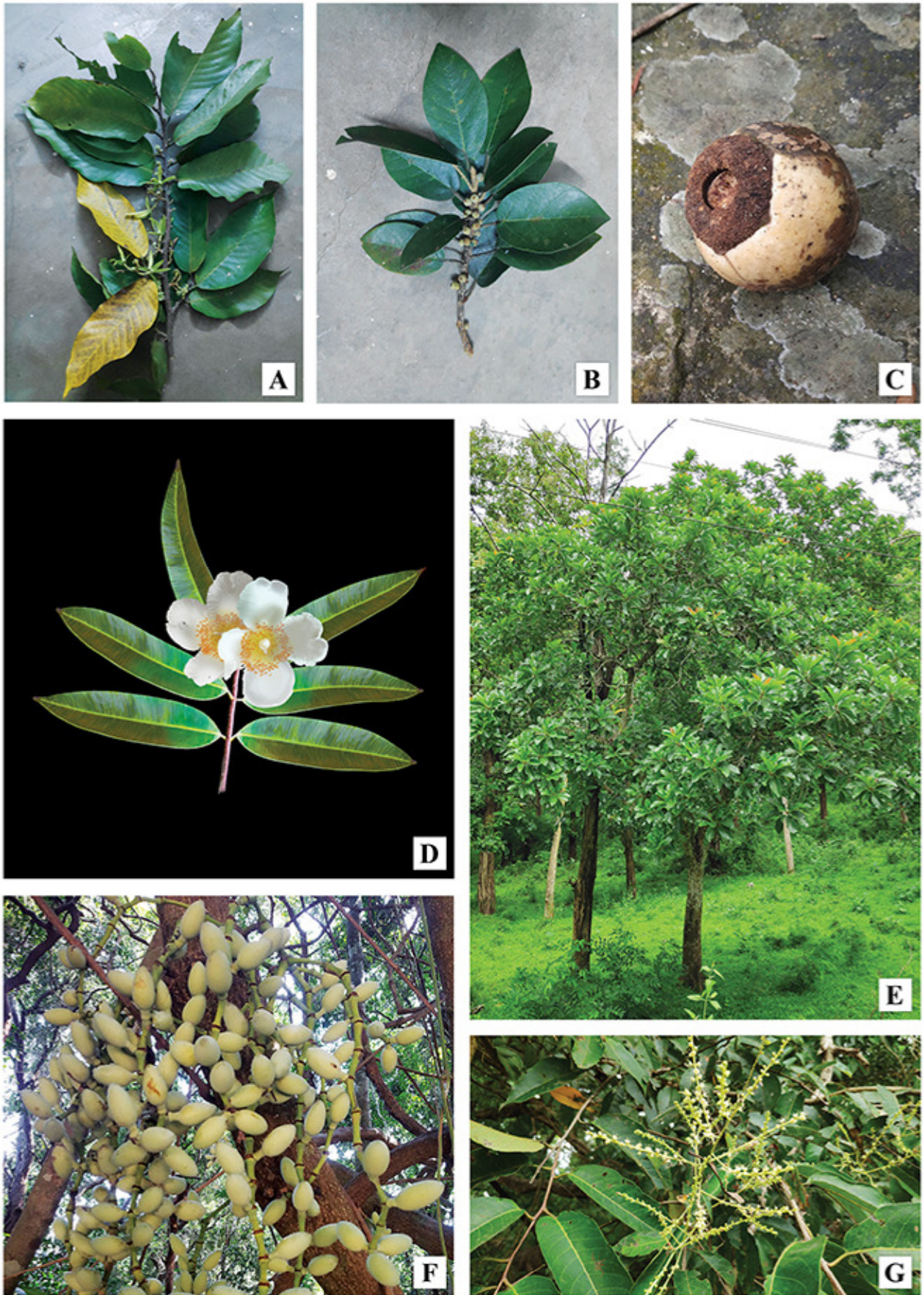
**Fig. 2.10** Ethno-florestic diversity of Kadar : A. 'Ullurinja, Urunchikaya, Poochakotta' (*Sapindus trifoliatus*), B. 'Kuntilapoovaan' (*Schleichera oleosa*), C. 'Marapanna' (*Acampe praemorsa*), D. 'Njara' (*Syzygium cumini*), E. 'Naikumbil' (*Mallotus nudiflorus*), F. 'Chorapathiri' (*Knema attenuata*), G. 'Kaippanagara' (*Elaeocarpus variabilis*).





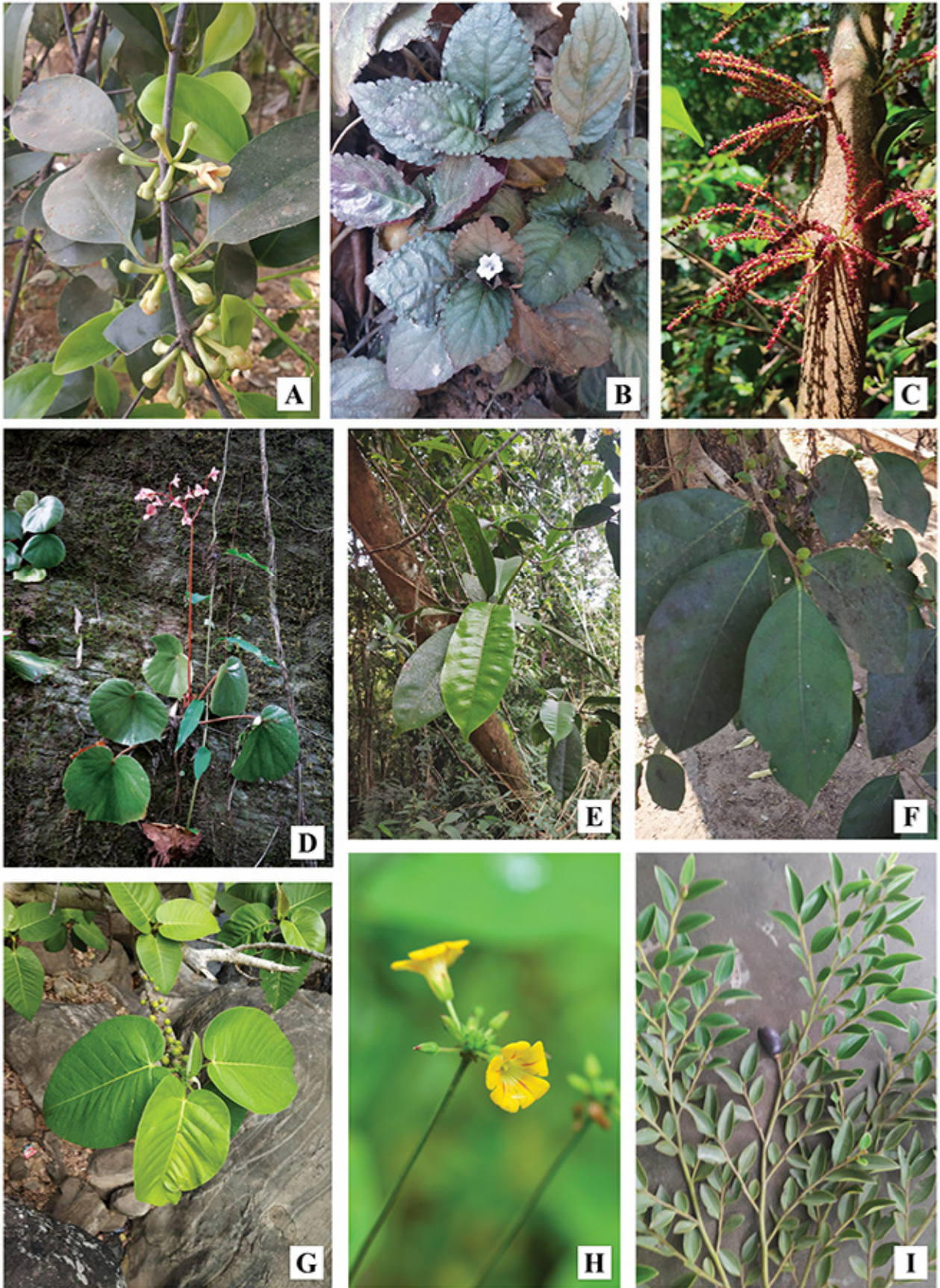
**Fig. 2.11 Ethno-florestic diversity of Kadar :** A. 'Kallichi' (*Ficus benghalensis*), B. 'Kannayanimaraavu' (*Ficus microcarpa*), C. 'Chola maraavu' (*Ficus virens*), D. 'Karimaraavu' (*Ficus nervosa*), E. 'Perunkurunnan' (*Paracroton pendulus*), F. 'Thondi, Peenari' (*Sterculia guttata*), G. 'Velleenga, Paaleenga' (*Senegalia caesia*), H. 'Elichevi' (*Parahemionitis cordata*), I. 'Arikumin' (*Termitomyces microcarpus*)





**Fig. 2.12** Ethno-florestic diversity of Kadar : A. 'Nedunaru' (*Monoon fragrans*), B. 'Kuntilamaravu' (*Ficus mollis*), C. 'Karimbvelli' (*Diospyros melanoxylon*), D. 'Naavu, Naangu' (*Mesua ferrea*) (digital painting), E. 'Punna/ Vazhapunna' (*Dillenia pentagyna*), F. 'Kuntikodi, Oolantha' (*Gnetum edule*), G. 'Pillamaruthu' (*Terminalia paniculata*).





**Fig. 2.13 Unique terminologies for flora by Kadar :** A. 'Puliyotta' (*Garcinia gummi-gutta*), B. 'Chikkambuvu' (*Strobilanthes alternata*), C. 'Oovathan' (*Baccaurea courtallensis*), D. 'Kalraangi' (*Begonia floccifera*), E. 'Vilmaraavu' (*Ficus travancorica*), F. 'Paraveeti' (*Ficus tinctoria*), G. 'Kuntilamaravu' (*Ficus anamalayana*), H. 'Chirikkampoovu' (*Biophytum sensitivum*), I. 'Karimthuvara' (*Diospyros buxifolia*).



Among the ethnofloristic diversity of *Kadar*, 63 threatened and endemic plant species out of which six are Near Threatened (NT), 18 are Vulnerable (VU), 14 are Endangered (EN), 16 plants were endemic to Western Ghats, 11 are endemic to the Southern Western Ghats, seven plants are endemic to Peninsular India.

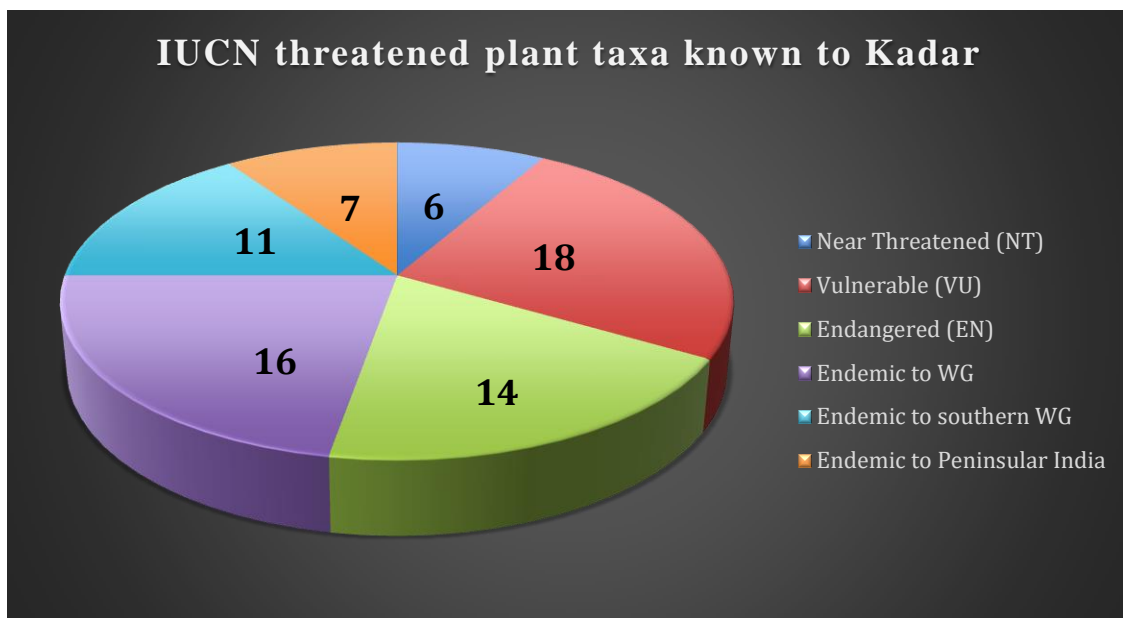


Fig. 2.14 IUCN threatened plant taxa known to *Kadar*

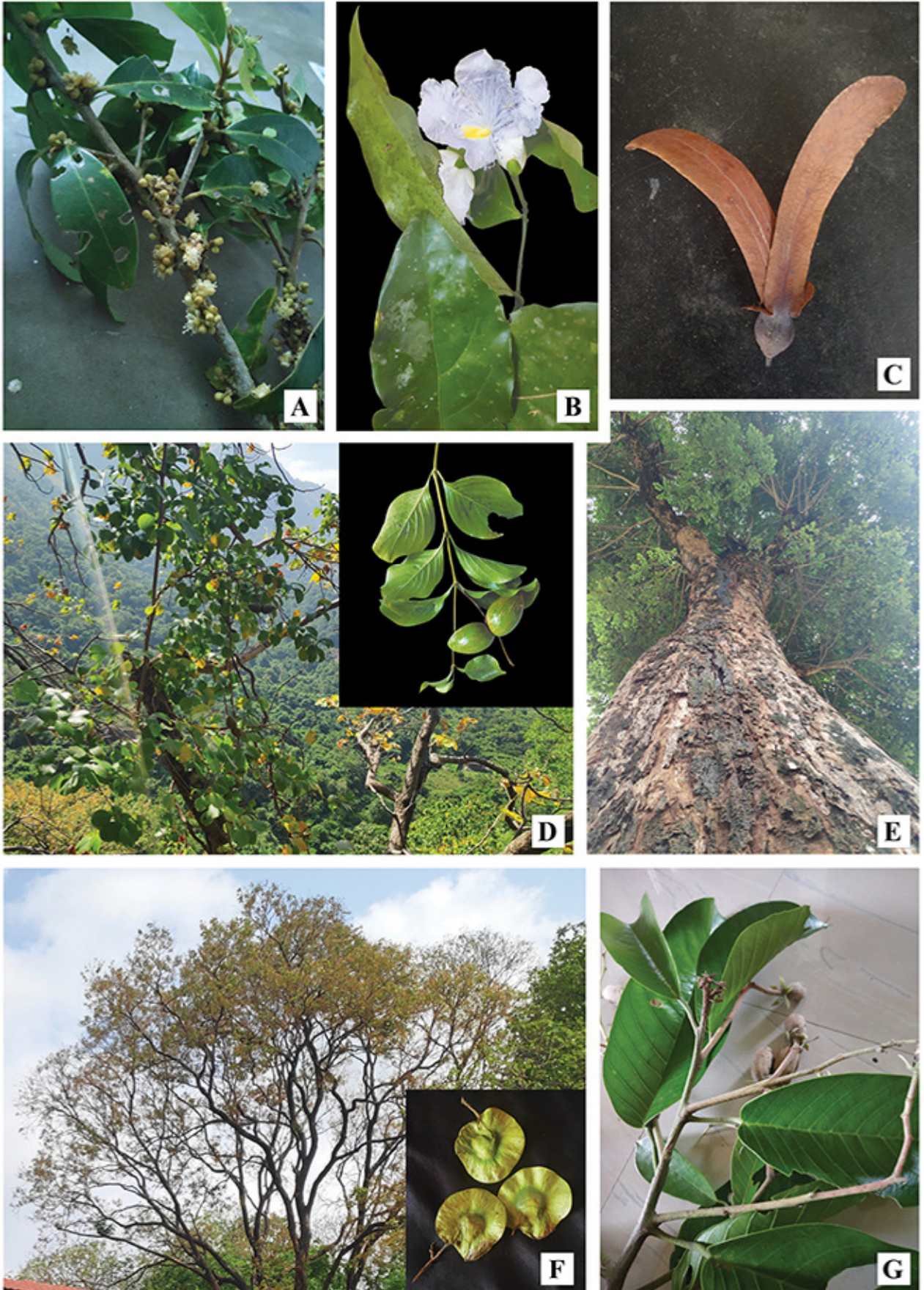
Table 2.4 Endemic and threatened flora known to *Kadar* ethnic community.

Sl. No	Name of the plant	Family	IUCN status and Endemism
1	<i>Andrographis elongata</i> (Vahl) T. Anderson	Acanthaceae	Endemic to WG
2	<i>Barleria courtallica</i> Nees.	Acanthaceae	Endemic to WG
3	<i>Justicia santapau</i> Bennet.	Acanthaceae	Endemic to Southern WG
4	<i>Rungia wightiana</i> Wall. ex Nees	Acanthaceae	Endemic to Southern WG
5	<i>Strobilanthes ciliatus</i> Wall. ex Nees	Acanthaceae	Endemic to Southern WG
6	<i>Hydnocarpus alpina</i> Wight	Achariaceae	VU
7	<i>Hydnocarpus macrocarpa</i> (Bedd.) Warb.	Achariaceae	VU, Endemic to WG
8	<i>Hydnocarpus pentandrus</i> (Buch. - Ham.) Oken	Achariaceae	VU, Endemic to WG

9	<i>Holigarna arnottiana</i> Wall. ex Hook. f.	Anacardiaceae	Endemic to Southern WG
10	<i>Holigarna beddomei</i> Hook. f.	Anacardiaceae	EN
11	<i>Holigarna ferruginea</i> Marchand	Anacardiaceae	Endemic to WG
12	<i>Holigrana grahmii</i> (Wight) Kurz,	Anacardiaceae	VU, Endemic to WG
13	<i>Semecarpus travancorica</i> Bedd.	Anacardiaceae	Endemic to Southern WG
14	<i>Solenocarpus indica</i> Wight & Arn.	Anacardiaceae	VU, Endemic to Southern WG
15	<i>Desmos viridiflorus</i> Saff.	Annonaceae	Endemic to Southern WG,
16	<i>Meiogyne pannosa</i> (Dalzell) J. Sinclair	Annonaceae	Endemic to WG
17	<i>Desmos ramarowii</i> (Dunn) D. Das	Annonaceae	Endemic to Southern WG
18	<i>Decalepis hamiltonii</i> Wight & Arn.	Apocynaceae	EN
19	<i>Amorphophallus commutatus</i> (Schott) Engl.	Araceae	Endemic to WG
20	<i>Arenga wightii</i> Griff.	Arecaceae	VU, Endemic to WG
21	<i>Calamus hookerianus</i> Becc.	Arecaceae	Endemic to WG
22	<i>Calophyllum calaba</i> L.	Calophyllaceae	Endemic to WG
23	<i>Capparis rheedii</i> DC.	Capparaceae	VU, Endemic to WG
24	<i>Terminalia paniculata</i> Roth.	Combretaceae	Endemic to Peninsular India
25	<i>Mastixia arborea</i> (Wight) C.B. Clarke	Cornaceae	Endemic to WG
27	<i>Vateria indica</i> L.	Dipterocarpaceae	VU
28	<i>Dipterocarpus indicus</i> Bedd.	Dipterocarpaceae	EN
29	<i>Hopea parviflora</i> Bedd.	Dipterocarpaceae	Endemic to Southern WG
30	<i>Hopea ponga</i> (Dennst.) Mabb.	Dipterocarpaceae	EN, Endemic to WG
31	<i>Diospyros assimilis</i> Bedd.	Ebenaceae	Endemic to WG
32	<i>Diospyros candolleana</i> Wight	Ebenaceae	VU, Endemic to Peninsular India
33	<i>Diospyros crumenata</i> Thwaites	Ebenaceae	EN
34	<i>Diospyros nilagirica</i> Bedd.	Ebenaceae	Endemic to Southern WG
35	<i>Diospyros paniculata</i> Dalzell	Ebenaceae	VU, Endemic to Peninsular India
	<i>Diospyros thwaitesii</i> (Hiern) Bedd.	Ebenaceae	VU, Endemic to Peninsular India
36	<i>Elaeocarpus munronii</i> (Wight) Mast.	Elaeocarpaceae	NT, Endemic to Southern WG

37	<i>Elaeocarpus variabilis</i> Zmarzty	Elaeocarpaceae	Endemic to WG
38	<i>Dalbergia latifolia</i> Roxb.	Fabaceae	VU
39	<i>Prioria pinnata</i> (Roxb. ex DC.) Breteler	Fabaceae	EN, Endemic to Southern WG
40	<i>Pterocarpus marsupium</i> Roxb.	Fabaceae	NT
41	<i>Actinodaphne bourdillonii</i> Gamble	Lauraceae	Endemic to southern WG
42	<i>Actinodaphne tadulingamii</i> Gamble	Lauraceae	NT
43	<i>Cinnamomum sulphuratum</i> Nees	Lauraceae	VU, Endemic to WG
44	<i>Litsea beddomei</i> Hook.f.	Lauraceae	EN
45	<i>Litsea coriacea</i> (B. Heyne ex Nees) Hook. f.	Lauraceae	NT, Endemic to Peninsular India
46	<i>Litsea floribunda</i> (Blume) Gamble	Lauraceae	NT
47	<i>Litsea stocksii</i> Hook. fil.	Lauraceae	NT
48	<i>Lagerstroemia lanceolata</i> Wall.	Lythraceae	Endemic to WG
49	<i>Aglaia edulis</i> (Roxb.) Wall.	Meliaceae	NT
50	<i>Dysoxylum malabaricum</i> Bedd. ex Hiern	Meliaceae	EN
51	<i>Ensete superbum</i> (Roxb.) Cheesman	Musaceae	Endemic to Peninsular India
52	<i>Myristica malabarica</i> Lam.	Myristicaceae	VU
53	<i>Gymnacranthera canarica</i> (Bedd. ex King) Warb.	Myristicaceae	VU
54	<i>Syzygium caryophyllatum</i> (L.) Alston	Myrtaceae	EN
55	<i>Syzygium grande</i> (Wight) Walp.	Myrtaceae	Endemic to Southern WG
56	<i>Aporosa cardiosperma</i> (Gaertn.) Merr.	Phyllanthaceae	VU
57	<i>Baccaurea courtallensis</i> (Wight) Müll.Arg.	Phyllanthaceae	Endemic to Peninsular India
58	<i>Piper barberi</i> Gamble.	Piperaceae	EN
59	<i>Coffea arabica</i> L.	Rubiaceae	EN
60	<i>Psyrax dicoccos</i> Gaertn.	Rubiaceae	VU
61	<i>Palaquium ravii</i> Sasidh. & Vink	Sapotaceae	EN
62	<i>Pterospermum reticulatum</i> Wight & Arn.	Sterculiaceae	VU
63	<i>Cycas circinalis</i> L.	Cycadaceae	EN





**Fig. 2.15 IUCN threatened plant taxa :** A. *Litsea coriacea* (NT), B. *Capparis rheedii* (VU), C. *Dipterocarpus indicus* - fruit (EN), D. *Decalepis hamiltonii* (EN), E. *Dalbergia latifolia* (VU), F. *Pterocarpus marsupium* habitat & fruits (NT), G. *Vateria indica* (VU)





**Fig. 2.16** IUCN threatened plant taxa : A. *Syzygium caryophyllatum* (EN), B. *Aporosa cardio-sperma* (VU), C. *Cycas circinalis* (EN), D. *Hydnocarpus pentandrus* (VU).



### 2.3.1.2 Ethno zoological knowledge of *Kadar*.

The *Kadar* has in-depth ethnic knowledge on the faunal diversity of the landscape they are living in. The high diversity richness of the Anamalais in Western Ghats reflected in the traditional ethnic knowledge acquired by the endemic indigenous group. There are 50 mammals, 167 birds, 30 reptiles, three amphibians, 33 fishes and 19 insects are known to *Kadar* with ethnic terminologies.

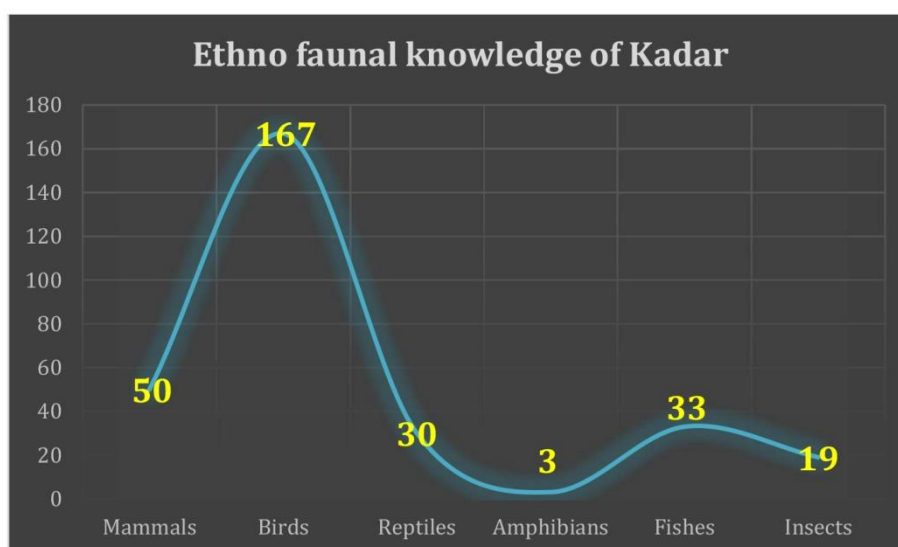


Fig. 2.17 Ethno faunal knowledge of *Kadar*.

Among the mammals, 37 species nomenclature were unique, also for 39 birds, 12 reptiles, three amphibians, 28 fishes and 24 insects. The *Kadar* community has unique ethnofloristic nomenclature for some families and genus among fauna. It includes eight families from mammals, eighteen families from birds, two from fishes and three for reptiles. The number of genera with unique nomenclature are mammals (3), birds (2), fishes (2), and reptiles (3). All these terminologies for fauna are given by the *Kadar* community based on characteristics like colour, physical appearance, behaviour, habitat adding to some experiences or beliefs.

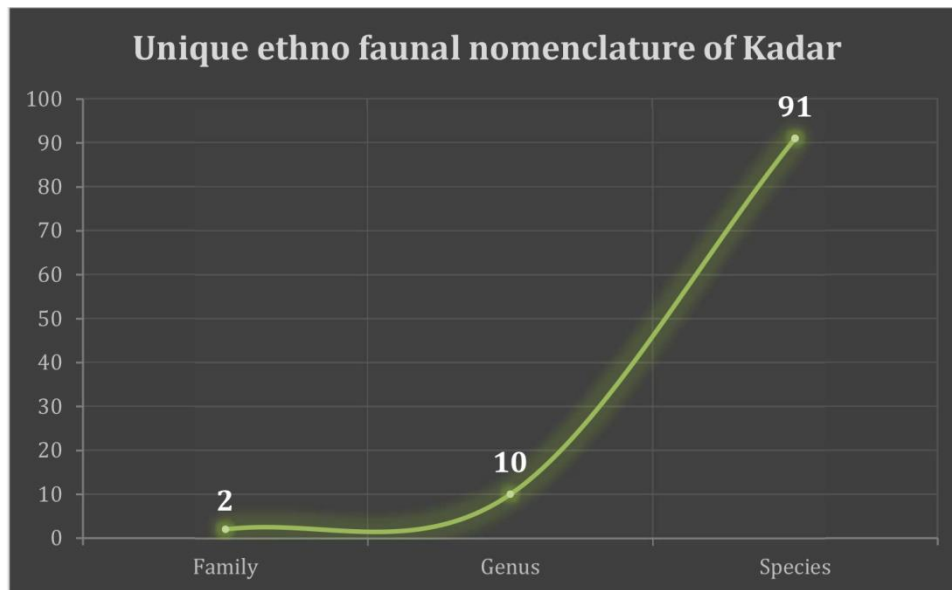


Fig. 2.18 Unique ethno faunal nomenclature for family genus and species of *Kadar*.

The ‘*Karimanthi*’ is the term for Nilgiri Langur (*Semnopithecus johnii*), in which the ‘*Kari*’ denoted the black colour. Another example is the Stripe-necked Mongoose (*Herpestes vitticollis*) has the name ‘*Chemboothaveruk*’ because of its reddish hairy appearance. Based on the physical characteristics; they called ‘*Ambukettaan*’ for Greater racket-tailed Drongo (*Dicrurus paradiseus*.) because the shape of the tail is like an arrow. Ruddy Mongoose (*Herpestes smithii*) is the ‘*Poovaaliveruku*’ because its tail end is like a hairy inflorescence. They called ‘*Variyanpuli*’ for tiger (*Panthera tigris*) due to the black lines in the body. Gunther’s Catfish has two pairs of barbels so they are called ‘*Komban*’. Some terminologies are based on the food habit of fauna species, The ‘*Kurunthenunniveruk*’ for Brown Mongoose (*Herpestes fuscus*) because they observed that the Brown mongoose eats the ‘*Kuruthen*’ (honey from the hive of *Apis ceranata indica*), Asian palm civet (*Paradoxurus hermaphroditus*) eats junglefowl (*Gallus sonneratii*) so they are called ‘*Koyiveruk*’. ‘*Koyi*’ is the local name of fowl and ‘*Veruk*’ is a terminology for the mongoose family Herpestidae. The Oriental dollar bird (*Eurystomus orientalis*) eats the honey so they call ‘*Thenchiraaki*’. ‘*Then*’ is the term for honey. The Carnatic Carp (*Barbodes carnaticus*) fish eats ‘*pachila*’ (the green leaves) so they call ‘*Pachilavetti*’. Some ethnic nomenclatures are based on similarity to

other objects in use eg. Black eagle (*Ictinaetus malaiensis*.) is named 'Payamuraam' due to the similarity of the wings of the eagle to 'Payamuraam' (old winnowing sieve). The name for Indian Glassy Fish (*Parambassis ranga*) is 'Chillumeen', because the body is transparent like 'Chillu' (glass).

Some ethnic nomenclatures are based on special behaviour of an organism such as 'Koottupaambu' for King Cobra (*Ophiophagus hannah*.) because it is the only nestmaking snake we have. Here, the term 'Koottu' means the nest. The Hump-nosed Viper's (*Hypnale hypnale*) head is always pointing to the sky so they call it 'Vaannokipaambu'. Sky is the meaning of 'Vaan'. The Flying Squirrel (*Petaurista philippensis*) is called 'Paattaaan' due to its gliding behaviour. The Southern Flying Lizard (*Draco dussumieri*) has the name 'Paaronthi' due to the similar flying feature.

The *Kadar* has spiritual values to some species. They have been considered elephants, wild gaur, Malabar whistling thrush as their ancestors. They have a secret terminology for tigers; that is 'Mattan'. They do not say 'Variyanpuli' or 'Puli'(Tiger) when they are in the forest. Instead, they use the word 'Mattan'. They believe it as matter of respect which can avoid the tiger's attacks.



**A**



**B**



**C**



**D**



**E**



**F**



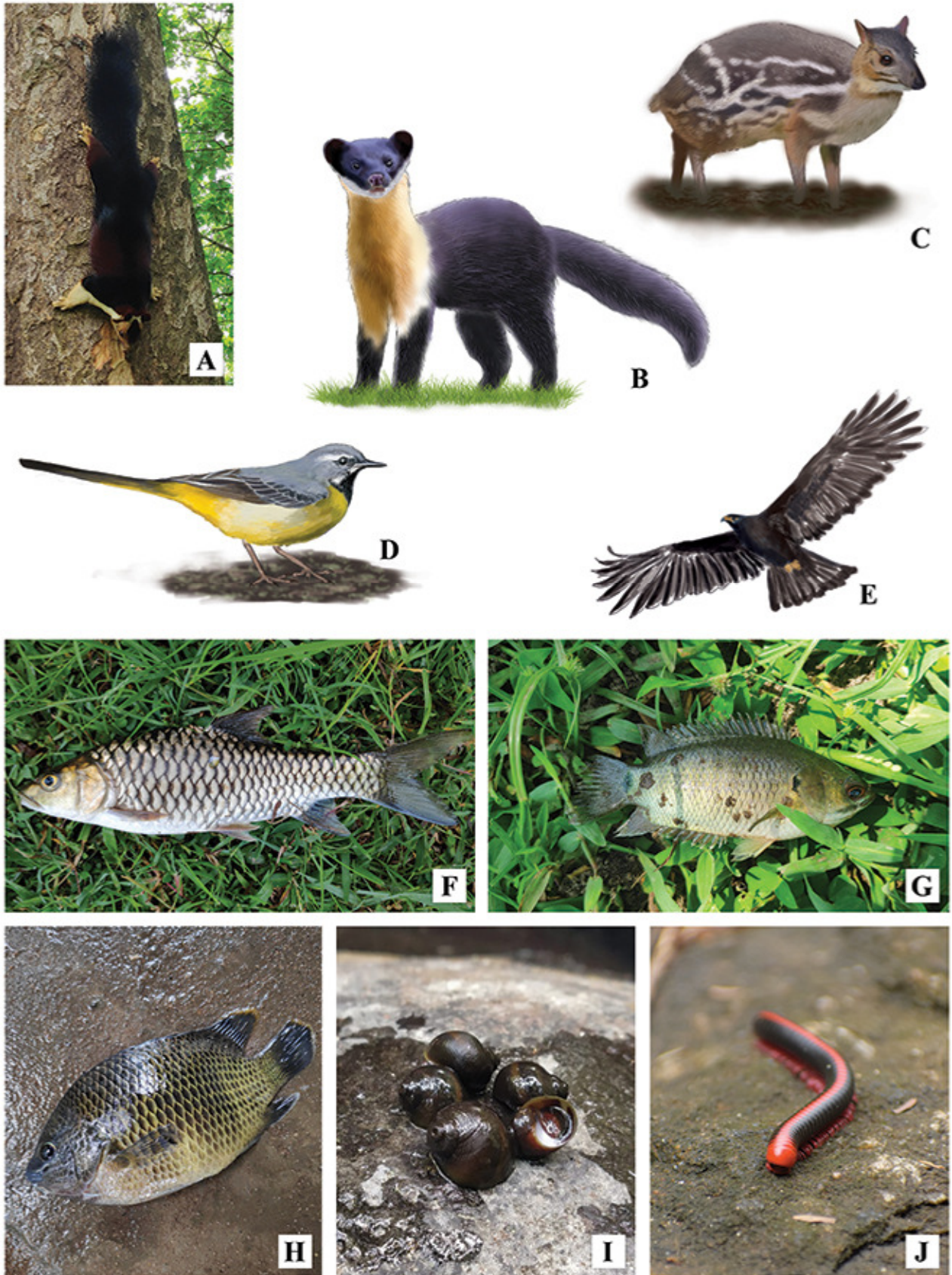
**G**



**H**

**Fig. 2.19 Ethno-faunal diversity of Kadar :** A. 'Aana' (*Elephas maximus*), B. 'Ambukettaan' (*Dicurus paradiseus*), C. 'Baavil' (*Pteropus medius*), D. 'Chirapoolnaama, Cheenkaninaama' (*Vijayachelys silvatica*), E. 'Pandakotti' (*Tettigonia viridissima*) (digital painting), F. 'Perumpaambu' (*Python molurus*), G. 'Kanayaan' (*Rasbora dandia*), H. 'Kuzhikuthi kooral' (*Hypseleobarbus kolus*). B, D & F are digitally painted.





**Fig. 2.20 Unique terminologies for fauna by Kadar :** A. 'Venka' (*Ratufa indica*), B. 'Venkapuli' (*Martes gwatkinsii*) (digital painting), C. 'Kooranpanti' (*Moschiola indica*), D. 'Kattankadali' (*Motacilla cinerea*), E. 'Payamuraam, Karimparunthi' (*Ictinaetus malaiensis*) (digital painting), F. 'Choor' (*Tor khudree*), G. 'Kallanchilopi' (*Anabas testudineus*), H. 'Karopi' (*Pristolepis marginata*), I. 'Theri' (*Cremnochonchus* sp.), J. 'Vengalapaambu' (*Xenobolus carnifex*). C & D are digitally painted.



Table 2.5 Unique terminologies for fauna by *Kadar* ethnic community

Sl. No.	Species	Family	Common name	Unique name of <i>Kadar</i>
	<b>Mammals</b>			
1	<i>Bos gaurus</i>	Bovidae	Gaur	Pothu / Kaati
2	<i>Macaca silenus</i>	Cercopithecidae	Lion-tailed Macaque	Chettikuraanku
3	<i>Macaca radiata</i>	Cercopithecidae	Bonnet Macaque	Chikkilikuraank / Velukkale
4	<i>Semnopithecus johnii</i>	Cercopithecidae	Nilgiri Langur	Karimanthi/ Karinkuraanku / Karivakuraanku
5	<i>Muntiacus muntjak</i>	Cervidae	Barking Deer	Keymaan
6	<i>Rusa unicolor</i>	Cervidae	Sambar Deer	Kadamaan / Kalamaan
7	<i>Paraechinus nudiventris</i>	Erinaceidae	Bare-bellied hedgehog, Madras hedgehog	Mullaneli
8	<i>Felis chaus</i>	Felidae	Jungle cat, Reed cat, Swamp cat	Chappilapoocha
9	<i>Panthera pardus</i>	Felidae	Common Leopard	Puli / Nari
10	<i>Panthera tigris</i>	Felidae	Tiger	Variyan / Variyanpuli / Nari
11	<i>Herpestes fuscus</i>	Herpestidae	Brown Mongoose	Kurunthenunniveruk
12	<i>Herpestes smithii</i>	Herpestidae	Ruddy Mongoose	Poovaaliveruku
13	<i>Herpestes vitticollis</i>	Herpestidae	Stripe-necked Mongoose	Chemboothaveruk
14	<i>Hystrix indica</i>	Hystricidae	Indian crested porcupine	Mullanpanti
15	<i>Lepus nigricollis</i>	Leporidae	Indian Hare or Black-naped Hare	Muyaal
16	<i>Loris tardigradus</i>	Lorisidae	Slender Loris	Kolchaambi
17	<i>Manis crassicaudata</i>	Manidae	Indian pangolin,	Chalunku / Chalunkumullan

			Thick-tailed pangolin, Scaly anteater	
18	<i>Millardia meltada</i>	Muridae	Field Rat	Pantiyeli
19	<i>Mus musculus</i>	Muridae	House Mouse	Mudayeli
20	<i>Platacanthomys lasiurus</i>	Muridae	Malabar Spiny Dormouse	Poovaalaneli
21	<i>Aonyx cinereus</i>	Mustelidae	Asian small-clawed otter, Oriental small-clawed otter, Small-clawed otter	Veruk/thanniveruk / meenveruk
22	<i>Lutrogale perspicillata</i>	Mustelidae	Smooth-coated Otter	Veruk/thanniveruk / meenveruk
23	<i>Martes gwatkinsii</i>	Mustelidae	Nilgiri Marten	Venkapuli
24	<i>Pteropus medius</i>	Pteropodidae	Indian flying fox	Baavil
25	<i>Funambulus palmarum</i>	Sciuridae	Indian palm squirrel, Three-striped palm squirrel	Choondiyanna
26	<i>Funambulus sublineatus</i>	Sciuridae	Nilgiri striped squirrel	Eettachoondi
27	<i>Petinomys fuscicapillus</i>	Sciuridae	Travancore flying squirrel, Small flying squirrel	Punchiri paataan
28	<i>Petaurista philippensis</i>	Sciuridae	Indian giant flying squirrel, Large brown flying squirrel, Common giant flying squirrel	Paataan / Paarachaathan
29	<i>Ratufa indica</i>	Sciuridae	Indian giant squirrel, Malabar giant squirrel	Venka
30	<i>Sus scrofa</i>	Suidae	Wild Boar	Panti
31	<i>Moschiola indica</i>	Tragulidae	Mouse Deer	Kooraan / Kooraanpanti
32	<i>Melursus ursinus</i>	Ursidae	Sloth Bear	Karaadi

33	<i>Paradoxurus hermaphroditus</i>	Viverridae	Asian palm civet, Common palm civet, Toddy cat	Maraveruku / Koiveruk
34	<i>Paradoxurus jerdoni</i>	Viverridae	Brown palm civet, Jerdon's palm civet	Kariveruk
35	<i>Viverra civettina</i>	Viverridae	Malabar large-spotted civet, Malabar civet	Pulliveruk
36	<i>Viverra zibetha</i>	Viverridae	Large Indian Civet	Veruk
37	<i>Viverricula indica</i>	Viverridae	Small Indian civet	Pooveruku
	<b>Birds</b>			
1	<i>Accipiter badius</i>	Accipitridae	Shikra, Little banded goshawk	Chirivilaanthan, Pulparunth
2	<i>Ictinaetus malaiensis</i>	Accipitridae	Black eagle	Payamuraam, Karimparunthi
3	<i>Pericrocotus flammeus</i>	Aegithinidae	Orange Minivet, Scarlet Minivet	Nallakalyanathi / Chepar kalyanathi(M), kalla kalyanathi(F)
4	<i>Pelargopsis capensis</i>	Alcedinidae	Stork-billed kingfisher	Valiyaponba
5	<i>Anhinga melanogaster</i>	Anhingidae	Oriental darter	Konga
6	<i>Anthracoceros coronatus</i>	Bucerotidae	Malabar pied hornbill, Lesser pied hornbill	Vattionkal
7	<i>Buceros bicornis</i>	Bucerotidae	Great hornbill, Concave-casqued hornbill, Great Indian hornbill, Great pied hornbill	Onkal
8	<i>Ocyrceros griseus</i>	Bucerotidae	Malabar grey hornbill	Cherattaaan
9	<i>Vanellus indicus</i>	Charadriidae	Red-wattled	Titipaan, Aalkaatti

			lapwing	
10	<i>Chalcophaps indica</i>	Columbidae	Common emerald dove, Asian emerald dove, Grey-capped emerald dove	Pachapuraavu
11	<i>Columba elphinstonii</i>	Columbidae	Nilgiri wood pigeon	Painpothi, Painpothipuraavu
12	<i>Ducula badia</i>	Columbidae	Mountain imperial pigeon, Maroon-backed imperial pigeon, Hodgson's imperial pigeon	Thellipuraavu
13	<i>Eurystomus orientalis</i>	Coraciidae	Oriental dollarbird	Thenchiraaki
14	<i>Dendrocitta leucogastra</i>	Corvidae	White-bellied Treepie	Kiyanguchortta
15	<i>Dicrurus adsimilis</i>	Dicruridae	Fork-tailed drongo, Common drongo, African drongo, Savanna drongo	Kaattool
16	<i>Dicrurus paradiseus</i>	Dicruridae	Greater racket-tailed drongo	Ambukettaan
17	<i>Cecropis daurica</i>	Hirundinidae	Red-rumped Swallow, Striated Swallow	Alavanaadi
18	<i>Psilopogon haemacephalus</i>	Megalaimidae	Coppersmith barbet, Crimson-breasted barbet, Coppersmith	Thuthankora



19	<i>Psilopogon malabaricus</i>	Megalaimidae	Malabar barbet	Thuthankora
20	<i>Psilopogon viridis</i>	Megalaimidae	White-cheeked barbet, Small green barbet	Pachakkora
21	<i>Copsychus saularis</i>	Muscicapidae	Oriental magpie-robin	Manjoothan
22	<i>Myophonus horsfieldii</i>	Muscicapidae	Malabar whistling thrush, Whistling schoolboy	Poola / Muthiyarukili
23	<i>Galloperdix spadicea</i>	Phasianidae	Red spurfowl	Chundaathan
24	<i>Gallus sonneratii</i>	Phasianidae	Grey junglefowl, Sonnerat's junglefowl	Perinat chathappan(M), pidasikozhi(F)
25	<i>Hemicircus canente</i>	Picidae	Heart-spotted woodpecker	Manicheera
26	<i>Pitta brachyura</i>	Pittidae	Indian pitta	Karivela
27	<i>Batrachostomus moniliger</i>	Podargidae	Sri Lanka frogmouth, Sri Lankan frogmouth, Ceylon frogmouth	Kolnath
28	<i>Loriculus vernalis</i>	Psittaculidae	Vernal Hanging-Parrot (Indian Lorikeet)	Chooriakili
29	<i>Psittacula columboides</i>	Psittaculidae	Blue-winged parakeet, Malabar parakeet	Panantha, Pananthakkili
30	<i>Psittacula krameri</i>	Psittaculidae	Rose-ringed parakeet, Ring-necked parakeet	Kili, Pachapanantha
31	<i>Pycnonotus jocosus</i>	Pycnonotidae	Red-whiskered Bulbul, Red-whiskered Bulbul	Kuthikuliyaaan
32	<i>Amaurornis phoenicurus</i>	Rallidae	White-breasted	Kulakozhi,

			waterhen	Kulakoyi
33	<i>Porphyrio porphyrio</i>	Rallidae	Purple Swamphen, Western Swamphen	Thodaakoyi
34	<i>Athene brama</i>	Strigidae	Spotted owlet	Nathu
35	<i>Glaucidium radiatum</i>	Strigidae	Jungle owlet, Barred jungle owlet	Nathu
36	<i>Ketupa zeylonensis</i>	Strigidae	Brown fish owl	Njandukooma, Nundkooma
	<i>Strix ocellataa</i>	Strigidae	Mottled wood owl	Kottaan / Aanakottaan
	<i>Acridotheres tristis</i>	Sturnidae	Common myna, Indian myna	Kaakaradu
37	<i>Gracula religiosa</i>	Sturnidae	Common hill myna, Hill myna, Myna bird	Kaanuvaan
38	<i>Harpactes fasciatus</i>	Trogonidae	Malabar trogon	Kottottaan
39	<i>Upupa epops</i>	Upupidae	Eurasian hoopoe	Thengachiravan
	<b>Fishes</b>			
1	<i>Parambassis ranga</i>	Ambassidae	Indian Glassy Fish	Chillumeen
2	<i>Anabas testudineus</i>	Anabantidae	Climbing perch	Karoppi
3	<i>Aplocheilus lineatus</i>	Aplocheilidae	Striped panchax/ Golden wonder killifish	Nettipottan
4	<i>Horabagrus brachysoma</i>	Bagridae	Gunther's Catfish/ Bull eye catchfish/ Sun catfish/ Yellow catfish/ Golden red tail catfish	Komban
5	<i>Homaloptera montana</i>	Balitoridae	Aanamalai	Paarotta

			loach/ Zig zag sucker fish	
6	<i>Channa gachua</i>	Channidae	Dwarf snake head	Karithala
7	<i>Channa striata</i>	Channidae	Striped Snakehead/ Asian shakehead/ Common snakehead	Chodiyam
8	<i>Oreochromis mossambicus</i>	Cichlidae	Mozambique Tilapia	Chiloppi, Kallanchilopi (Male at breeding season)
9	<i>Clarias dussumieri</i>	Clariidae	Valencienne's sc larid	Moyi
10	<i>Barbodes carnaticus</i>	Cyprinidae	Carnatica Carp, Carnatic Carp	Pachilavetti
11	<i>Catla catla</i>	Cyprinidae	Catla	Kalivu
12	<i>Cyprinus carpio</i>	Cyprinidae	Wild Common Carp	Kalivu
13	<i>Dawkinsia assimilis</i>	Cyprinidae	Mascara Barb	Pandan / Pakiri
14	<i>Dawkinsia filamentosa</i>	Cyprinidae	Black Spot Barb/ Filament barb	Pandan / Pakiri
15	<i>Devario malabaricus</i>	Cyprinidae	Malabar Danio/ Gaint danio	Polaantha
16	<i>Garra mullya</i>	Cyprinidae	Mullyagarra	Kallotti / Moykmeen
17	<i>Hypselobarbus kolus</i>	Cyprinidae	Kolus barb	Kuzhikuthikooral
18	<i>Hypselobarbus pulchellus</i>	Cyprinidae		Eettavetti / Eettapachilavetti
19	<i>Labeo rohita</i>	Cyprinidae	Rohu	Rogu
20	<i>Rasbora dandia</i>	Cyprinidae	Common Rasbora	Kanayaan
21	<i>Systomus sarana</i>	Cyprinidae	Olive barb, Peninsular olive barb, Pondicherry barb	Kalivu

22	<i>Tor khudree</i>	Cyprinidae	Deccan Mahseer	Choorra
23	<i>Lepidocephalichthys thermalis</i>	Cobitidae	Malabar loach	Koicha
24	<i>Heteropneustes fossilis</i>	Heteropneustidae	Stinging Catfish	Oosimeen
25	<i>Macrogathus malabaricus</i>	Mastacembelidae	Malabar spinyeel	Aaral
26	<i>Mastacembelus armatus</i>	Mastacembelidae	Spinny eel	Aaral
27	<i>Ompok bimaculatus</i>	Siluridae	Indian Butter Catfish	Ponnaan
28	<i>Glyptothorax annandalei</i>	Sisoridae		Komban
	<b>Reptiles</b>			
1	<i>Ahaetulla sahyadrensis</i>	Colubridae		Kolvaraadipaambu
2	<i>Bungarus caeruleus</i>	Elapidae	Common Krait, Common Indian Krait, Blue Krait Indian Krait	Kettupiriyan
3	<i>Ophiophagus hannah</i>	Elapidae	King Cobra	Karivayala / Koottupaambu
4	<i>Echis carinatus</i>	Viperidae	Saw-scaled Viper	Chortta
5	<i>Hypnale hypnale</i>	Viperidae	Hump-nosed Viper, Common Hump-nosed Pit Viper	Vaannokipaambu
6	<i>Crocodylus palustris</i>	Crocodylidae	Broad-snouted Crocodile, Marsh Crocodile, Mugger, Mugger Crocodile	Muthaala
7	<i>Varanus bengalensis</i>	Varanidae	Bengal Monitor, Indian monitor	Udumbu
8	<i>Chamaeleo zeylanicus</i>	Chamaeleonidae	Indian Chameleon	Mayileru
9	<i>Draco dussumieri</i>	Agamidae	Southern	Paaronthi

			Flying Lizard, South Indian flying lizard	
10	<i>Vijayachelys silvatica</i>	Geoemydidae	Cochin Forest Cane Turtle	Chirapoolnaama / Cheenkaninaama
11	<i>Indotestudo travancorica</i>	Testudinidae	Travancore Tortoise	Kuntivarinaama
12	<i>Lissemys punctata</i>	Trionychidae	Indian Flapshell Turtle	Neernaama
	<b>Amphibians</b>			
1	<i>Cremnochonchus</i> sp.	Littorinidae	Small freshwater snail	Their
2	<i>Nasikabatrachus sahyadrensis</i>	Nasikabatrachida e	Purple frog	Kottaan / Thattukottaan
3	<i>Oligochaeta</i> Sp.		Earthworm	Choola
	<b>Insects and others</b>			
1	Gerrid Sp.	Gerridae	Water striders	Keuththaavaachi
2	<i>Apis cerana indica</i>	Apidae	Indian honey bee	Kurunna
3	<i>Apis dorsata</i>	Apidae	Giant honey bee	Vanthen
4	<i>Apis florea fabricius</i>	Apidae	Dwarf honey bee, Red dwarf honey bee	kēāṭṭān
5	<i>Tetragonula iridipennis</i>	Apidae	Indian stingless bee, Dammar bee	Karinthan
6	<i>Acheta domesticus</i>	Gryllidae	House cricket	Moonkri
7	<i>Gryllotalpa</i> Sp.	Gryllotalpidae	Mole cricket	Moonkri
8	Pyrgomorphidae Sp.	Pyrgomorphidae	Grasshopper	Kotti
9	<i>Tettigonia viridissima</i>	Tettigoniidae	Great green bush-cricket	Pandakotti
10	Acrididae Sp.	Acrididae	Grasshopper	Chathukotti
11	Acrididae Sp.	Acrididae	Grasshopper	Therli
12	Cicadidae Sp.	Cicadidae	cicada	Cheeveedu
13	<i>Phyllochoreia</i> Sp.	Chorotypidae	Leaf insect	Kotti
14	<i>Poecilotheria regalis</i>	Theraphosidae	Tiger spider	Puliyerumontha



15	Order: Araneae	Class: Arachnida	Spider	Vannaan
16	Suborder: Rhopalocera	Order: Lepidoptera	Butterfly	Vandu
17	Suborder(unranked): Heterocera	Order: Lepidoptera	Moth	Vandu
18	Suborder: Epiprocta	Order: Odonata	Dragonfly	Oolaanthi
19	Suborder: Zygoptera	Order: Odonata	Damselfly	Kolvandu
20	Myrmeleontidae Sp.	Myrmeleontidae	Antlion	Poonai
21	Order: Isoptera	Super order: Dictyoptera	Termite	Aayal
22	Class: Diplopoda	Subphylum: Myriapoda	Millipede	Vengalapaampu
23	Superorder: Oniscomorpha	Infraclass: Pentazonia	Pill millipede	Kannurutta
24	Suborder: Pleocyemata	Order: Decapoda	Fresh water shrimp	Itta

Table 2.6. Unique Ethnofaunal terminologies for genus by *Kadar* ethnic community

Sl.No.	Genera	Common name	Terminology of <i>Kadar</i>
	<b>Mammals</b>		
1	<i>Prionailurus</i>	Cat	Pochaveruku
	<b>Birds</b>		
1	<i>Haliaeetus</i>	Fish eagle	Meenkayiku
2	<i>Turdoides</i>	Babbler	Peenaal, Chilappan
	<b>Fishes</b>		
1	<i>Barilius</i>	Baril	Paavaayi
	<b>Reptiles</b>		
1	<i>Trimeresurus</i>	Pit Viper	Pachachortta
2	<i>Calotes</i>	Green Forest Lizard	Pachonthi

3	<i>Monilesaurus</i>	Forest Lizard	Unakkonchi
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Table 2.7 Unique Ethnofaunalterminologies for families by *Kadar* ethnic community

Sl.No.	Family	Common name	Terminology of <i>Kadar</i>
	<b>Mammals</b>		
1	Herpestidae	Mongoose	Veruk
2	Mustelidae	Otter	Veruk
3	Sciuridae	Squirrel	Anna
	<b>Birds</b>		
1	Accipitridae	Eagle	Kayiku
2	Alcedinidae	kingfisher	Ponba
3	Apodidae	Swift	Alavanaadi
4	Ardeidae	Egret	Vellappaaru
5	Bucerotidae	Hornbill	Onkal
6	Caprimulgidae	Nightjar	Paalaan
7	Columbidae	Dove	Puraavu
8	Dicruridae	Drongo	Kaattool
9	Hemiprocnidae	Treeswift	Alavanaadi
10	Hirundinidae	Swallow	Alavanaadi
11	Megalaimidae	Barbet	Kora
12	Meropidae	Bee-eater	Therlipullu
13	Motacillidae	Wagtail	Kattankadali
14	Nectariniidae	Sunbird	Mulkunthi
15	Oriolidae	Oriole	Manjalthevi

16	Phalacrocoracidae	Cormorant	Konga
17	Picidae	Woodpecker	Cheera
	<b>Fishes</b>		
1	Anguillidae	Shortfin eel	Malaanchi
	<b>Reptiles</b>		
1	Geoemydidae	Cane Turtle	Naama
2	Testudinidae	Tortoise	Naama
3	Trionychidae	Flapshell Turtle	Naama

The Ethnofaunal diversity of *Kadar* include many threatened and endemic species. Among mammals there are one Near Threatened, seven Vulnerable, six Endangered, one Critically Endangered, and two species endemics to Western Ghats were documented. Among the birds, four species are Near Threatened and three are Vulnerable. Among the fishes, there are three Near Threatened species, six Vulnerable, two Endangered and one Critically Endangered species. In reptiles, there are six Near Threatened species, three Vulnerable and one Endangered. Among the amphibians documented, one was Endangered and one was endemic to Western Ghats (IUCN, 2022).

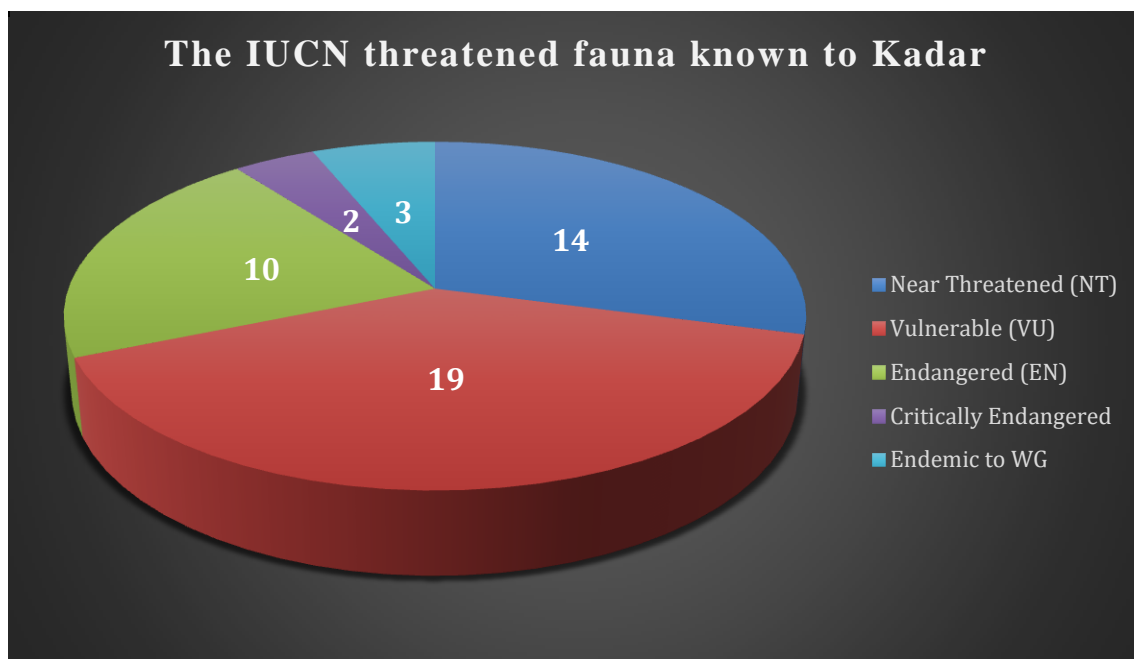


Fig. 2.21 The IUCN threatened fauna known to *Kadar*.

Table 2.8 Identified threatened and endemic fauna of *Kadar* ethnic community

Sl. No	Scientific name	Family	English name	IUCN status / Endemism
<b>Mammals</b>				
1	<i>Bos gaurus</i>	Bovidae	Gaur	VU
2	<i>Nilgiri tragus hylocrius</i>	Bovidae	NilgiriThar	EN
3	<i>Macaca silenus</i>	Cercopithecidae	Lion-tailed Macaque	EN
4	<i>Cuon alpinus</i>	Canidae	Wild Dog	EN
5	<i>Rusa unicolor</i>	Cervidae	Sambar Deer	VU
6	<i>Elephas maximus</i>	Elephantidae	Asian Elephant	EN
7	<i>Panthera pardus</i>	Felidae	Common Leopard	VU
8	<i>Panthera tigris</i>	Felidae	Tiger	EN
9	<i>Prionailurus rubiginosus</i>	Felidae	Rusty-spotted cat	NT
10	<i>Manis crassicaudata</i>	Manidae	Indian pangolin, Thick-tailed pangolin, Scaly anteater	EN
11	<i>Aonyx cinereus</i>	Mustelidae	Asian small-clawed otter, Oriental small-clawed otter, Small-clawed otter	VU

12	<i>Lutrogale perspicillata</i>	Mustelidae	Smooth-coated Otter	VU
13	<i>Martes gwatkinsii</i>	Mustelidae	Nilgiri Marten	VU
14	<i>Melursus ursinus</i>	Ursidae	Sloth Bear	VU
15	<i>Paradoxurus jerdoni</i>	Viverridae	Brown palm civet, Jerdon's palm civet	LC, Endemic to WG
16	<i>Viverra civettina</i>	Viverridae	Malabar large-spotted civet, Malabar civet	CR, Endemic to WG
	<b>Birds</b>			
1	<i>Haliaeetus humilis</i>	Accipitridae	Lesser fish eagle	NT
2	<i>Haliaeetus ichthyaetus</i>	Accipitridae	Grey-headed fish eagle	NT
3	<i>Anhinga melanogaster</i>	Anhingidae	Oriental darter	NT
4	<i>Anthracoceros coronatus</i>	Bucerotidae	Malabar pied hornbill, Lesser pied hornbill	NT
5	<i>Buceros bicornis</i>	Bucerotidae	Great hornbill, Concave-casqued hornbill, Great Indian hornbill, Great pied hornbill	VU
6	<i>Ocyrceros griseus</i>	Bucerotidae	Malabar grey hornbill	VU
7	<i>Columba elphinstonii</i>	Columbidae	Nilgiri wood pigeon	VU
	<b>Fishes</b>			
1	<i>Anguilla bengalensis</i>	Anguillidae	African Mottled eel/ Indian mottled eel/ Mottled eel	NT
2	<i>Anguilla bicolorbicolor</i>	Anguillidae	Shortfin eel	NT
3	<i>Horabagrus brachysoma</i>	Bagridae	Gunther's Catfish/ Bull eye catchfish/ Sun catfish/ Yellow catfish/ Golden red tail catfish	VU
4	<i>Homaloptera montana</i>	Balitoridae	Aanamalai loach/ Zig zag sucker fish	EN
5	<i>Oreochromis mossambicus</i>	Cichlidae	Mozambique Tilapia	VU
6	<i>Clarias dussumieri</i>	Clariidae	Valencienne'sclarid	VU



7	<i>Barilius canarensis</i>	Cyprinidae	Mirror fish/ Jerdon'sbaril	EN
8	<i>Cyprinus carpio</i>	Cyprinidae	Wild Common Carp	VU
9	<i>Dawkinsia assimilis</i>	Cyprinidae	Mascara Barb	VU
10	<i>Hypselobarbus kolus</i>	Cyprinidae	Kolus barb	VU
11	<i>Hypselobarbus pulchellus</i>	Cyprinidae		CR
12	<i>Ompok bimaculatus</i>	Siluridae	Indian Butter Catfish	NT
	<b>Reptiles</b>			
1	<i>Eryx conicus</i>	Boidae	Common Sand Boa, Rough-tailed Sand Boa, Russell's Sand Boa	NT
2	<i>Eryx johnii</i>	Boidae	Red Sand Boa	NT
3	<i>Eryx whitakeri</i>	Boidae	Whitaker's Boa, Whitaker's Sand Boa	NT
4	<i>Ahaetulla dispar</i>	Colubridae	Günther's Vine Snake	NT
5	<i>Ophiophagus hannah</i>	Elapidae	King Cobra	VU
6	<i>Python molurus</i>	Pythonidae	Indian Rock Python	NT
7	<i>Trimeresurus macrolepis</i>	Viperidae	Large-scaled green pit viper, Large- scaled Pit Viper	NT
8	<i>Crocodylus palustris</i>	Crocodylidae	Broad-snouted Crocodile, Marsh Crocodile, Mugger, Mugger Crocodile	VU
9	<i>Vijayachelys silvatica</i>	Geoemydidae	Cochin Forest Cane Turtle	EN
10	<i>Indotestudo travancorica</i>	Testudinidae	Travancore Tortoise	VU
	<b>Amphibians</b>			
1	<i>Nasikabatrachus sahyadrensis</i>	Nasikabatrachid ae	Purple frog	EN (endemic to WG)

## 2.3.2 Biodiversity knowledge of *Malasar*

### 2.3.2.1 Ethnofloristic knowledge of *Malasar*

The *Malasar* ethnic community is inhabited chiefly in the dry-moist deciduous forests part and few villages are found in evergreen forest areas. Most of them now settled in villages of Palakkad district of Kerala and Coimbatore district Tamil Nadu. They mostly use the Tamil language. Also, they have their unique terminologies for flora and fauna. The *Malasar* community identified 191 species of flora which includes 181 angiosperms, one gymnosperm, eight fungi and one pteridophyte.

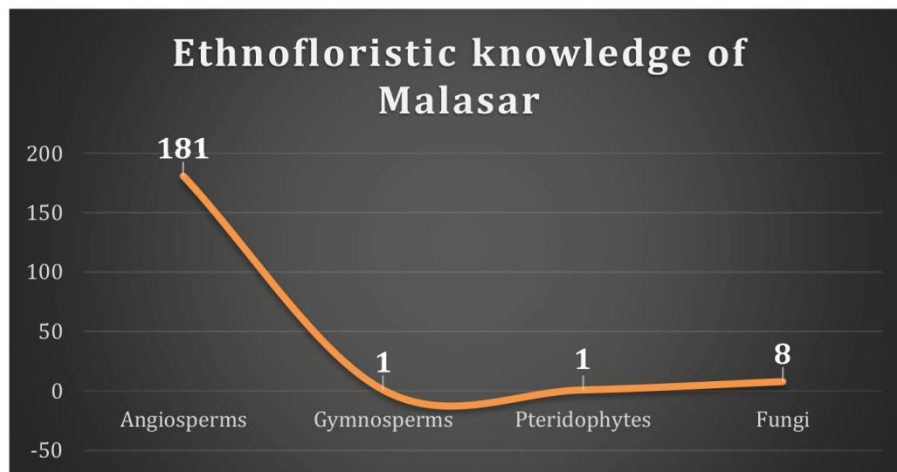


Fig. 2.22 Ethnofloristic knowledge of *Malasar*.

The *Malasar* ethnic name for the plant group pteridophyte is '*Panna*' and for fungi it is '*Kegal*'. They have some special terminology for tubers that have '*Shangu*' and leafy vegetables called '*Lakri*'. Examples of '*Shangu*' are '*Magaalishangu*' (*Decalepis hamiltonii*) and '*Noopashangu*' (*Dioscorea bulbifera*), examples of '*Lakri*' are '*Mullulakri*' (*Amaranthus spinosus*), '*Kuppalakri*' (*Amaranthus viridis*), etc.

*Malasar* also gives names based on the physical characteristic and habitat for example, the genus *Ziziphus* they commonly called '*Chodalimullu*' because the plant is commonly seen in '*Chodala*' (graveyard), and genus *Syzygium* is termed '*Njava*'. The Water-spinach

(*Ipomoea aquatica*) is seen in wetlands or moist water spread areas so they are called ‘*Vellalakri*’. In fungi, they give names based on shape, colour. The *Pleurotus spp.* they called ‘*Mungakegal*’ because the perforatorium is look like owl.

Total Ninety-two unique ethnofloristic terminologies were documented from the *Malasar* community. Among them, eighty-three were angiosperms, eight fungi and one from pteridophytes.

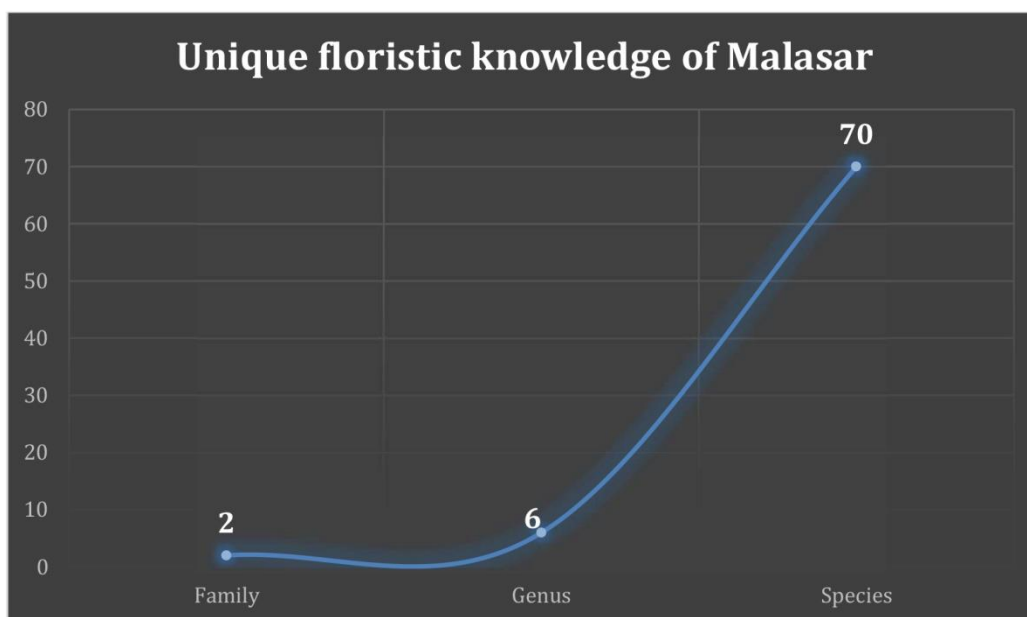


Fig. 2.23 Unique floristic knowledge of *Malasar* for family, genus and species.

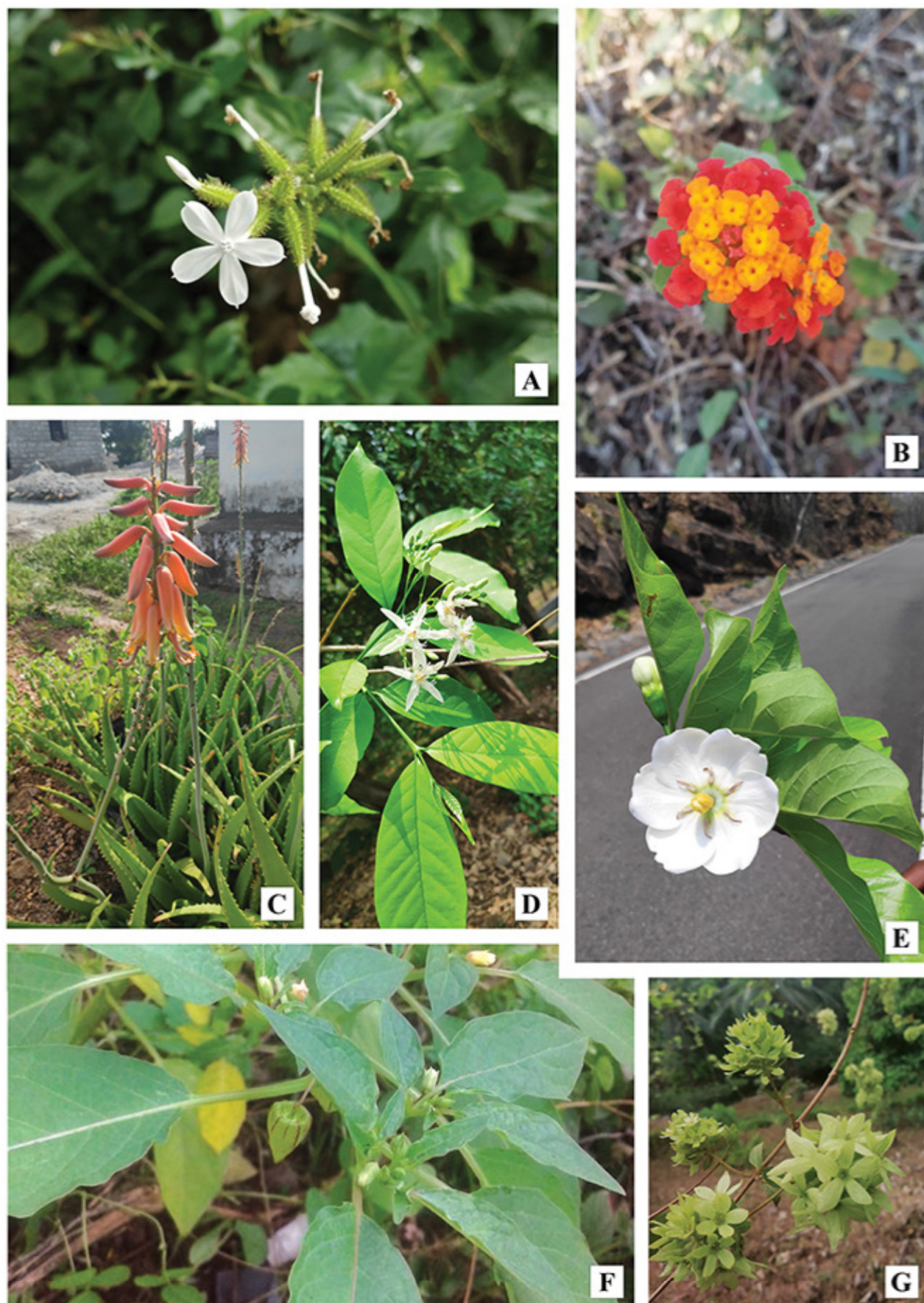
The *Malasar* community predominantly use the Tamil language even though they have a special dialect. They differentiate families, genera, and species with their own names. We have elucidated two unique ethnofloristic nomenclature for families, six for the different the genus, and 70 for the species.





**Fig. 2.24 Ethno-florestic diversity of Malasar :** A. 'Kanthari' (*Capsicum frutescens*), B. 'Irumullu' (*Xylia xylocarpa*), C. 'Edampiri Valampiri' (*Helicteres isora*), D. 'Kambilipulipalam' (*Antidesma acidum*), E. 'Vellathandu' (*Peperomia pellucida*), F. 'Thandanlakri' (*Acalypha hispida*).





**Fig. 2.25 Ethno-florestic diversity of Malasar :** A. 'Koduveli' (*Plumbago zeylanica*), B. 'Kongini, Aripalam' (*Lantana camara*), C. 'Kattarvazha, Kathala' (*Aloe vera*), D. 'Dhandhapaala' (*Wrightia tinctoria*), E. 'Kalikarai' (*Tamilnadia uliginosa*), F. 'Pottaari' (*Physalis angulata*), G. 'Pullaani' (*Getonia floribunda*).





**Fig. 2.26 Unique terminologies for flora by Malasar :** A. 'Kaanakapazham' (*Milusa tomentosa*), B. 'Janamkolli' (*Cissampelos pareira*), C. 'Onkattapazham' (*Argyreia hirsuta*), D. 'Vakaravalli' (*Camonea umbellata*), E. 'Pannimoottaal kilangu' (*Spatholobus parviflorus*), F. 'Kana-koorkka' (*Coleus barbatus*).

Table 2.9 Unique Ethnobotanical nomenclature for flora by *Malasar* ethnic community

Sl. No.	Name of the Plant	IUCN status	Endemism	Ethnobotanical of <i>Malasar</i>	Ethnobotanical unique to <i>Malasar</i>
	<b>Angiosperms</b>				
	<b>Acanthaceae</b>				
1	<i>Justicia beddomei</i> (C.B. Clarke) Bennet	NE		Adalodakam	
2	<i>Ruellia prostrata</i> Poir.	NE		Thuppallupadakkam	
3	<i>Strobilanthes alternata</i> (Burm. f.) Moylan ex J. R. I. Wood	NE		Murikootti	
	<b>Aizoaceae</b>				
4	<i>Trianthema portulacastrum</i> L.	NE			Seraniakri
	<b>Amaranthaceae</b>				
5	<i>Achyranthes aspera</i> L.	NE			Oorankaya chedi
6	<i>Achyranthes aspera</i> var. <i>porphyristachya</i> (Wall. ex Moq.) Hook.f.	NE			Oorankaya chedi
7	<i>Achyranthes aspera</i> var. <i>pubescens</i> (Moq.) M. Gómez	NE			Oorankaya chedi
8	<i>Alternanthera sessilis</i> (L.) R.Br. ex DC.	LC		Ponnamkannikkeera, Meenamkannikkeera	
9	<i>Amaranthus hybridus</i> L.	NE			Thandanlakri
10	<i>Amaranthus tricolor</i> L.	NE			Lakri
11	<i>Amaranthus spinosus</i> L.	NE		Mullukeerai, Mullulakri	
12	<i>Amaranthus viridis</i> L.	NE		Kuppakeerai, Kuppalakri	
13	<i>Celosia argentea</i> L.	LC			Pannalakri
	<b>Anacardiaceae</b>				
14	<i>Mangifera indica</i> L.	DD		Kattumanga	
15	<i>Semecarpus anacardium</i> L. f.	NE		Cherupalam	
16	<i>Spondias pinnata</i> (L.f.) Kurz.	NE		Ambazham	
	<b>Annonaceae</b>				
17	<i>Miliusa tomentosa</i> (Roxb.) Finet & Gagnep.	NE			Kaanakapazham
18	<i>Monoon coffeoides</i> (Thwaites ex Hook. f. & Thomson) B. Xue & R.	NE		Nedunaru	

	M. K. Saunders				
19	<i>Monoon fragrans</i> (Dalzell) B. Xue & R. M. K. Saunders	NE		Nedunaru	
	<b>Apiaceae</b>				
20	<i>Centella asiatica</i> (L.) Urb.	LC		Vallaralakri	Masthishkalakri
	<b>Apocynaceae</b>				
21	<i>Alstonia scholaris</i> (L.) R. Br.	LC		Ezhilumpalam/ Paala	
22	<i>Calotropis gigantea</i> (L.) W. T. Aiton	NE		Erukku	
23	<i>Decalepis hamiltonii</i> Wight & Arn.	EN		Magaalikizhangu / Magaalikilangu	
24	<i>Decalepis salicifolia</i> Bedd. ex Venter	EN		Magaalikizhangu / Magaalikilangu	
25	<i>Hemidesmus indicus</i> (L.) R. Br.	NE		Nannari	
26	<i>Holostemma ada-kodien</i> Schult.	NE			Anjampaalalakri
27	<i>Pergularia daemia</i> (Forsskal) Chiov.	LC		Velipparuthi	
28	<i>Tabernaemontana</i> <i>alternifolia</i> L.	NE		Kundalapaala	
29	<i>Wrightia tinctoria</i> (Roxb.) R. Br.	NE		Dhandhapaala	
	<b>Araceae</b>				
30	<i>Amorphophallus</i> <i>paeoniifolius</i> (Dennst.)	LC		Kattuchena	
31	<i>Colocasia esculenta</i> (L.) Schott	LC		Chembukilangu / Chembu / Sembulakri	
	<b>Arecaceae</b>				
32	<i>Areca catechu</i> L.	NE		Paakkmaram	
33	<i>Arenga wightii</i> Griff.	VU	Endemic to Western Ghats	Malanthengu	
34	<i>Borassus flabellifer</i> L.	NE		Karimbana	
35	<i>Calamus hookerianus</i> Becc.		Endemic to Western Ghats	Vallichoorapalam	
36	<i>Calamus thwaitesii</i> Becc.	NE		Ponthichoorapalam	
37	<i>Caryota urens</i> L.	LC		Panai	
38	<i>Cocos nucifera</i> L.	NE		Thengu	
39	<i>Phoenix loureiroi</i> Kunth	LC		Cheevan	
40	<i>Pinanga dicksonii</i>	NE		Kaattupaakkumara	

	(Roxb.) Blume			m	
	<b>Asparagaceae</b>				
41	<i>Asparagus racemosus</i> Willd.	NE		shathavalli / Chathavalli	
	<b>Asteraceae</b>				
42	<i>Chromolaena odorata</i> (L.) R. M. King & H. Rob.	NE		Communist-pacha	
43	<i>Cyanthillium cinereum</i> (L.) H. Rob.	NE		Poovamkurunal	
44	<i>Eclipta prostrata</i> (L.) L.	LC		Kanjunni	
45	<i>Sphaeranthus indicus</i> L.	LC		Kottakaranda	
46	<i>Cyanthillium cinereum</i> (L.) H. Rob.	NE		Poovamkurunal	
	<b>Basellaceae</b>				
47	<i>Basella alba</i> L.	NE		Vasalalakri	
	<b>Boraginaceae</b>				
48	<i>Cordia dichotoma</i> G. Forst.	NE			Thumbapalam
49	<i>Ehretia aquatica</i> (Lour.) Gottschling & Hilger	LC		Kallurvachi	
	<b>Cactaceae</b>				
50	<i>Opuntia dillenii</i> (Ker Gawl.) Haw.	NE		Mullukallipalam	
	<b>Calophyllaceae</b>				
51	<i>Mesua ferrea</i> L.	NE		Naangu	
	<b>Campanulaceae</b>				
52	<i>Lobelia heyneana</i> Schult.	LC		Maankeera	Maanlakri
	<b>Cannabaceae</b>				
53	<i>Trema orientale</i> (L.) Blume	LC		Amai thali	
	<b>Caricaceae</b>				
54	<i>Carica papaya</i> L.	DD		Pappali	
	<b>Celastraceae</b>				
55	<i>Salacia reticulata</i> Wight	NE		Ekanayakam	
	<b>Clusiaceae</b>				
56	<i>Garcinia gummi-gutta</i> (L.) Roxb.	LC		Kodampuli	
	<b>Combretaceae</b>				
57	<i>Terminalia arjuna</i> (Roxb. ex DC.) Wight & Arn.	NE		Neermaruth	
58	<i>Terminalia bellirica</i> (Gaertn.) Roxb.	NE		Thannimaram	
59	<i>Terminalia chebula</i> Retz.	LC		Kadukka	



60	<i>Terminalia paniculata</i> B. Heyne ex Roth		Endemic to Peninsular India	Pillamaruthu	
	<b>Convolvulaceae</b>				
61	<i>Argyreia hirsuta</i> Wight & Arn.	NE			Onkattapazham
62	<i>Argyreia nervosa</i> (Burm. f.) Bojer	NE			Onkattapazham
63	<i>Ipomoea aquatica</i> Forssk.	LC			Vellalakri
64	<i>Ipomoea batatas</i> (L.) Lam.	DD			Chakkaravallikizhangu
65	<i>Camonea umbellata</i> (L.) A. R. Simões & Staples	NE			Vakaravalli
	<b>Cucurbitaceae</b>				
66	<i>Coccinia grandis</i> (L.) Voigt	NE		Kovalakri	
67	<i>Cucumis prophetarum</i> L.	NE			Chithrankai
68	<i>Cucumis sativus</i> L.	NE		Vellari	
69	<i>Cucurbita maxima</i> Duchesne	NE			Arasankani
70	<i>Diplocyclos palmatus</i> (L.) C. Jeffrey	NE			Ivirallakri
71	<i>Cucumis melo</i> L.	NE			Peekinkayi
72	<i>Momordica dioica</i> Roxb. ex Willd.	NE			Paavalailakri
	<b>Dioscoreaceae</b>				
73	<i>Dioscorea alata</i> L.	NE			Kaavuthshangu
74	<i>Dioscorea bulbifera</i> L.	NE			Noopashangu
75	<i>Dioscorea hispida</i> Dennst.	NE			Thalishangu
76	<i>Dioscorea intermedia</i> Thwaites	NE			Pillamkodi
77	<i>Dioscorea oppositifolia</i> L.	NE			Kaanakishangu
78	<i>Dioscorea pentaphylla</i> L.	NE			Naattushangu
79	<i>Dioscorea spicata</i> B. Heyne ex Roth	NE			Mankodi
80	<i>Dioscorea tomentosa</i> J. Koenig ex Spreng.	NE			Shjelushangu
81	<i>Dioscorea wallichii</i> Hook. f.	LC			Naarushangu
	<b>Euphorbiaceae</b>				
82	<i>Euphorbia hirta</i> L.	NE			Murikootti
83	<i>Jatropha curcas</i> L.	LC			Kotta



84	<i>Manihot esculenta</i> Crantz	NE		Poolakilangu	
85	<i>Ricinus communis</i> L.	NE		Avanakku	
	<b>Fabaceae</b>				
86	<i>Vachellia nilotica</i> (L.) P. J. H. Hurter & Mabb.	NE		Karivelum	
87	<i>Bauhinia racemosa</i> Lam.	NE			Kudakampuli
88	<i>Clitoria ternatea</i> L.	NE		Sankupushpum	
89	<i>Dalbergia latifolia</i> Roxb.	VU		Veetti	
90	<i>Pleurolobus gangeticus</i> (L.) J. St.-Hil. ex H. Ohashi & K. Ohashi	NE			Orela
91	<i>Dolichos trilobus</i> L.	NE		Kaattavarai	
92	<i>Entada rheedei</i> Spreng.	NE			Thaylakaay
93	<i>Erythrina variegata</i> L.	LC		Mullumurikk/ Muringa	
94	<i>Gliricidia sepium</i> (Jacq.) Kunth	LC		Seemakkonna	
95	<i>Mimosa pudica</i> L.	LC		Thottavaadi / Thottasukki	
96	<i>Pithecellobium dulce</i> (Roxb.) Benth.	LC			Pulipalam
97	<i>Pseudarthria viscida</i> (L.) Wight & Arn.	NE			Mukala
98	<i>Pterocarpus marsupium</i> Roxb.	NT		Venga	
99	<i>Senna occidentalis</i> (L.) Link	NE			Kolthakara
100	<i>Senna tora</i> (L.) Roxb.	NE		Sattithakarai	Chakkarathakara
101	<i>Sesbania grandiflora</i> (L.) Poir.	NE		Agathilakri	
102	<i>Spatholobus parviflorus</i> (Roxb. ex G. Don) Kuntze	LC			Pannimoottalkilangu/ Pannimoottalshangu
103	<i>Tamarindus indica</i> L.	LC		Pulinjikuru	
104	<i>Vigna unguiculata</i> (L.) Walp.	NE			Thanangani
105	<i>Xylia xylocarpa</i> (Roxb.) Taub.	LC		Irumullu	
	<b>Hypoxidaceae</b>				
106	<i>Curculigo orchioides</i> Gaertn.	NE		Nilappana	
	<b>Lamiaceae</b>				
107	<i>Leucas aspera</i> (Willd.) Link	NE		Thumba	

108	<i>Ocimum tenuiflorum</i> L.	NE		Thulasi	
109	<i>Coleus barbatus</i> (Andrews) Benth. ex G. Don	NE			Kanakoorka
110	<i>Vitex negundo</i> L.	LC		Karinochi	
	<b>Loganiaceae</b>				
111	<i>Strychnos nux-vomica</i> L.	NE		kanjiram	
	<b>Malvaceae</b>				
112	<i>Bombax insigne</i> Wall.	NE		Poolamaram	
113	<i>Cullenia exarillata</i> A. Robyns	NE		Karaani	
114	<i>Helicteres isora</i> L.	NE		Edampiri- Valampiri	
115	<i>Thespesia populnea</i> (L.) Sol. ex Corrêa	LC		Poovarasu	
116	<i>Sida rhombifolia</i> L.	NE		Kurunthotti	
117	<i>Sterculia foetida</i> L.	NE		Kaavala	
	<b>Marsileaceae</b>				
118	<i>Marsilea minuta</i> L.	LC			Aralakri
	<b>Meliaceae</b>				
119	<i>Azadirachta indica</i> A. Juss.	LC		Veppu	
	<b>Menispermaceae</b>				
120	<i>Cissampelos Pareira</i> L.	NE			Janamkolli
121	<i>Tinospora cordifolia</i> (Willd.) Hook.f. & Thomson	NE		Chittamruth	
	<b>Moraceae</b>				
122	<i>Artocarpus heterophyllus</i> Lam.	NE		Sakkaipalam	
123	<i>Artocarpus hirsutus</i> Lam.	LC		Ayannisakkaipalam	
124	<i>Ficus racemosa</i> L.	LC		Athi	
125	<i>Ficus religiosa</i> L.	NE		Arayal	
	<b>Moringaceae</b>				
126	<i>Moringa oleifera</i> Lam.	LC		Muringai	
	<b>Musaceae</b>				
127	<i>Ensete superbum</i> (Roxb.) Cheesman		Endemic to Peninsular India	Kalluvazha	
	<b>Myrtaceae</b>				
128	<i>Psidium guajava</i> L.	LC		KoyyaKaayi	
129	<i>Syzygium cumini</i> (L.) Skeels.	LC		Njava	

130	<i>Syzygium densiflorum</i> Wall. ex Wt. & Arn.	NE		Cherunjava	
	<b>Nyctaginaceae</b>				
131	<i>Boerhavia diffusa</i> L.	NE			Thamizhama / Komanamberilakri
	<b>Oxalidaceae</b>				
132	<i>Oxalis corniculata</i> L.	NE			Pulilakri
	<b>Pandanaceae</b>				
133	<i>Benstonea foetida</i> (Roxb.) Callm. & Buerki	NE		Kaithauzhi	
	<b>Passifloraceae</b>				
134	<i>Adenia hondala</i> (Gaertn.) W.J. de Wilde	NE			Kannanchirattalak ri
	<b>Phyllanthaceae</b>				
135	<i>Antidesma acidum</i> Retz.	LC			Kambilipulipalam
136	<i>Baccaurea courtallensis</i> (Wight) Müll. Arg.		Endemic to Peninsular India	Mootilpazham	
137	<i>Bridelia retusa</i> (L.) A. Juss.	LC		Mulluvenga	
138	<i>Phyllanthus emblica</i> L.	LC		Nellika	
139	<i>Breynia quadrangularis</i> (Willd.) Chakrab. & N. P. Balakr.	NE			Kurumurangai
	<b>Piperaceae</b>				
140	<i>Peperomia pellucida</i> (L.) Kunth	NE		Vellathandu	
141	<i>Piper betle</i> L.	NE		Vettila	
142	<i>Piper peepuloides</i> Roxb.	NE		Kattukurumulak	
143	<i>Piper longum</i> L.	NE		Thippali	
144	<i>Piper nigrum</i> L.	NE		Kurumulakai	
	<b>Plumbaginaceae</b>				
145	<i>Plumbago zeylanica</i> L.	NE		Koduveli	
	<b>Poaceae</b>				
146	<i>Bambusa bambos</i> (L.) Voss	NE		Mula	
147	<i>Eleusine coracana</i> (L.) Gaertn.	NE		Kora	
148	<i>Setaria italica</i> (L.) P. Beauv.	NE		Thina	
149	<i>Sorghum bicolor</i> (L.) Moench	NE		Poricholam	
150	<i>Zea mays</i> L.	LC		Makkacholam	
	<b>Polygonaceae</b>				

151	<i>Persicaria chinensis</i> (L.) H. Gross	NE			Odimadavalinalak ri
	<b>Portulacaceae</b>				
152	<i>Portulaca oleracea</i> L.	LC			Thammaikelantha n
	<b>Ranunculaceae</b>				
153	<i>Clematis zeylanica</i> (L.) Poir.	NE		Vathakodi	
	<b>Rhamnaceae</b>				
154	<i>Ziziphus glabrata</i> (B. Heyne ex Schult.) B. Heyne ex Wight & Arn.	NE		Kottamaram	
155	<i>Ziziphus mauritiana</i> Lam.	LC			Peumsooripalam
156	<i>Ziziphus oenoplia</i> (L.) Miller	NE		Sooripalam / Chodalimullu	
157	<i>Ziziphus rugosa</i> Lam.	NE			Kottalaipalam
	<b>Rosaceae</b>				
158	<i>Rubus glomeratus</i> Blume	NE		Mullurojapalam	
	<b>Rubiaceae</b>				
159	<i>Tamilnadia uliginosa</i> (Retz.) Tirveng. & Sastre	NE		Kalikarai	
	<b>Rutaceae</b>				
160	<i>Glycosmis pentaphylla</i> (Retz.) DC.	LC		Pana	
	<b>Salicaceae</b>				
161	<i>Flacourtia montana</i> J. Graham	NE		Chalirupalam	
162	<i>Scolopia crenata</i> (Wight & Arn.) Clos	NE			Chithalipalam
	<b>Sapindaceae</b>				
163	<i>Cardiospermum halicacabum</i> L.	LC		Uzhinja	Niravalli
	<b>Sapotaceae</b>				
164	<i>Madhuca longifolia</i> (J. Koenig ex L.) J. F. Macbr.	NE			Pala palam
165	<i>Mimusops elengi</i> L.	LC		Ilanchi	
166	<i>Palaquium ellipticum</i> (Dalzell) Baill.	LC		Paali	
	<b>Solanaceae</b>				
167	<i>Capsicum frutescens</i> L.	LC		Kanthari	
168	<i>Datura metel</i> L.	NE		Oomanthai	
169	<i>Nicotiana tabacum</i> L.	NE		Pokala	
170	<i>Physalis angulata</i> L.	LC			Pottaari
171	<i>Physalis peruviana</i> L.	NE			Pottaari

172	<i>Solanum americanum</i> Mill.	NE		Sukkuttikeera	Sukkutilakri
173	<i>Solanum lycopersicum</i> L.	NE		Thakkali	
174	<i>Solanum melongena</i> L.	NE		Kathiri	
175	<i>Solanum torvum</i> Sw.	NE		Sunda	
	<b>Urticaceae</b>				
176	<i>Laportea interrupta</i> (L.) Chew.	NE		Thuvalakri	
	<b>Verbenaceae</b>				
177	<i>Lantana camara</i> L.	NE		Kongini, Aripalam	
	<b>Xanthorrhoeaceae</b>				
178	<i>Aloe vera</i> (L.) Burm. f.	NE		Kattarvazha, Kathala	
	<b>Zingiberaceae</b>				
179	<i>Curcuma zedoaria</i> (Christm.) Roscoe	DD		Maanginji	
180	<i>Zingiber neesatum</i> (J. Graham) Ramamoorthy	NE		Malayinji	
181	<i>Zingiber officinale</i> Roscoe	DD		Inji	
	<b>Gymnosperms</b>				
	<b>Cycadaceae</b>				
1	<i>Cycas circinalis</i> L.	EN		Eenthu	
	<b>Pteridophytes</b>				
	<b>Athyriaceae</b>				
1	<i>Diplazium esculentum</i> (Retz.) Sw.	LC		Surulilakri	
	<b>Fungi</b>				
	<b>Agaricaceae</b>				
1	<i>Lycoperdon perlatum</i> Pers.	LC			Panthrakelan
	<b>Auriculariaceae</b>				
2	<i>Auricularia auricula-judae</i> (Bull.) J. Schröt.	NE			Kathu kelan
	<b>Lyophyllaceae</b>				
3	<i>Termitomyces clypeatus</i>	NE			Pitulakegal
4	<i>Termitomyces microcarpus</i> (Berk and Br.) Helim.	NE			Arikegal
5	<i>Termitomyces eurhizus</i> (Berk) Him.	NE			Aanamethiyankegal
	<b>Pleurotaceae</b>				
6	<i>Pleurotus ostreatus</i> (Jacq.) P. Kumm.	NE			Marakkegal
7	<i>Pleurotus</i> spp.	NE			Mungakegal



	<b>Pluteaceae</b>				
8	<i>Volvariella volvacea</i> (Bull. Fr.) Singer	NE			Vaikkakegal

Table 2.10 Ethnofloristic nomenclature for Genera unique to *Malasar*

Sl. No.	Genera	Terminology of <i>Malasar</i>
1	<i>Amaranthus</i>	Lakri
2	<i>Monoon</i>	Nedunaru
3	<i>Argyreia</i>	Onkattapazham
4	<i>Senna</i>	Thakaralakri
5	<i>Ziziphus</i>	Chodalimullu
6	<i>Physalis</i>	Pottaari

Table 2.11 Ethnofloristic nomenclature for Families unique to *Malasar*.

Sl. No.	Family	Terminology of <i>Malasar</i>
1	Dioscoreaceae	Shangu
2	Salicaceae	Chalirupalam

Among the ethnofloristic known to *Malasar* five taxa are threatened species according the IUCN Redlist (Ver. 3.14, 2019). Among these there was one Near Threatened, two Vulnerable, two Endangered, and two species endemics to the Western Ghats, and three species are endemic to Peninsular India.

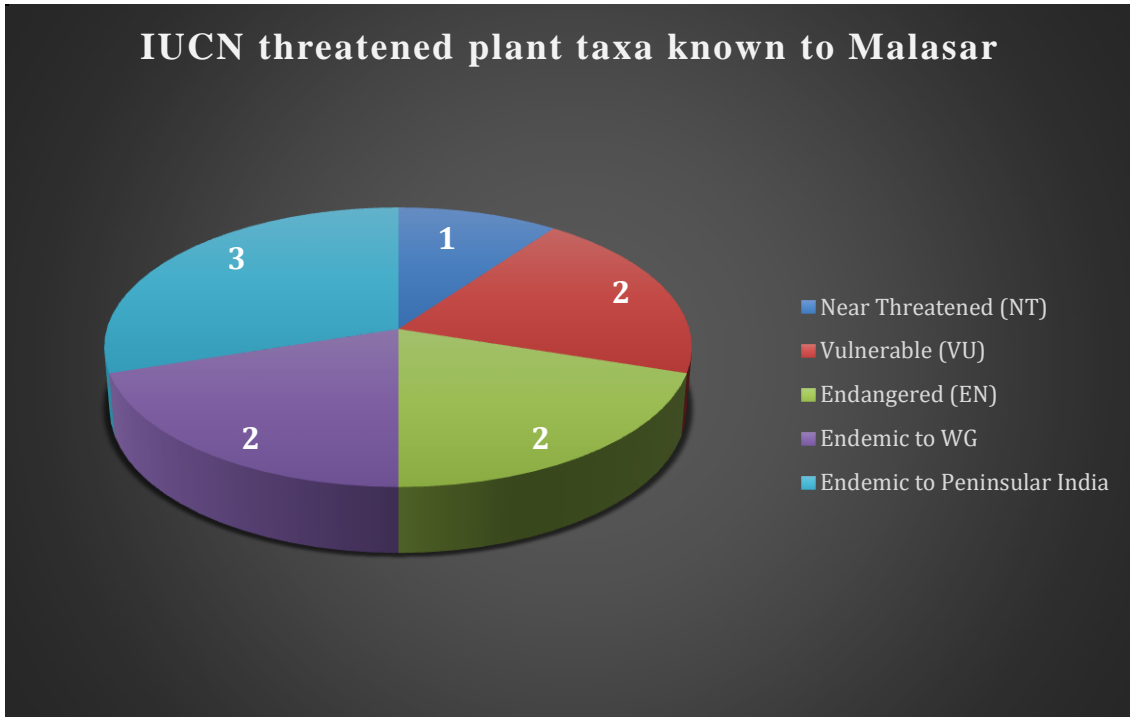


Fig. 2.27 IUCN threatened plant taxa known to *Malasar*.

Table 2.12 Identified threatened and endemic flora of *Malasar* ethnic community

Sl. No	Name of the plant	Family	IUCN status / Endemism
1	<i>Decalepis hamiltonii</i> Wight & Arn.	Apocynaceae	EN
2	<i>Arenga wightii</i> Griff.	Arecaceae	VU, Endemic to WG
3	<i>Calamus hookerianus</i> Becc.	Arecaceae	Endemic to WG
4	<i>Terminalia paniculata</i> Roth.	Combretaceae	Endemic to Peninsular India
5	<i>Dalbergia latifolia</i> Roxb.	Fabaceae	VU
6	<i>Pterocarpus marsupium</i> Roxb.	Fabaceae	NT
7	<i>Ensete superbum</i> (Roxb.) Cheesman	Musaceae	Endemic to Peninsular India
8	<i>Baccaurea courtallensis</i> (Wight) Müll. Arg.	Phyllanthaceae	Endemic to Peninsular India
9	<i>Cycas circinalis</i> L.	Cycadaceae	EN

### 2.3.2.2 Ethnofaunal knowledge of *Malasar*

One seventy species of fauna were documented known to *Malasar* ethnic community. Out of this forty-seven are mammals, seventy-seven birds, ten fishes, twenty-one reptiles, three amphibians and twelve insects.

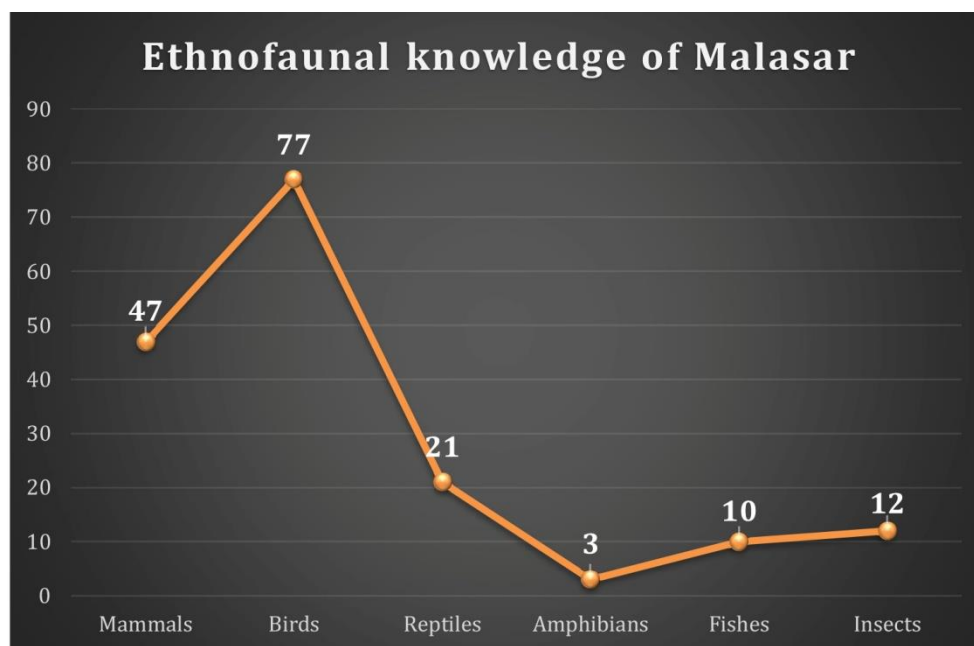


Fig. 2.28 Unique ethno faunal nomenclature for family genus and species of *Malasar*.

The ethnic nomenclature of *Malasars* are chiefly based on colour, appearance, habitat, etc. Generally, the *Malasar* community classifies all kind of yellow-coloured birds as "*Manjachoota*". The term "*Punnukuthi*" is used for the fish Mascara Barb (*Dawkinsia assimilis*), and Filament Barb (*Dawkinia filamentosa*) from its behaviour. The meaning of "*Punnukuthi*" is wound pecking. 47 species from fauna have unique nomenclature for *Malasar*, out of which 11 are of mammals, 14 for birds, five for fishes, four reptiles, two for amphibians, and eight unique terminologies for insects. Among the fauna two genera and eight families have names unique for *Malasar* community.

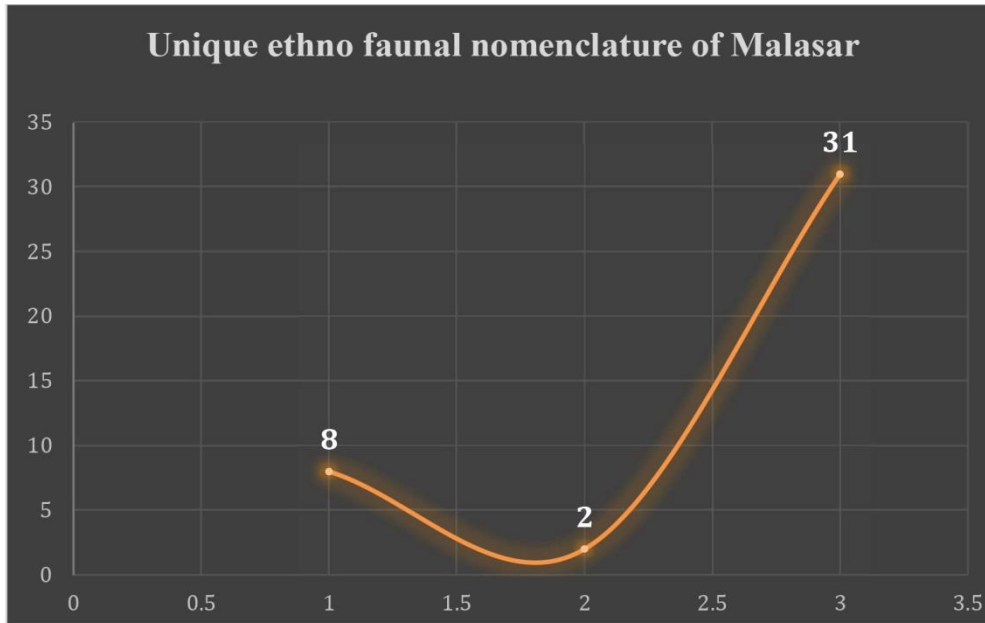


Fig. 2.29 Unique ethno faunal nomenclature for family genus and species of *Malasar*.

Table 2.13 Unique ethnic nomenclature for fauna by *Malasar* ethnic community

Sl. No.	Species	Family	Common name	Unique name of <i>Malasar</i>
<b>Mammals</b>				
1	<i>Macaca silenus</i>	Cercopithecidae	Lion-tailed Macaque	Manthi
2	<i>Muntiacus muntjak</i>	Cervidae	Barking Deer	Kelamaan
3	<i>Rusa unicolor</i>	Cervidae	Sambar Deer	Kadamai
4	<i>Lepus nigricollis</i>	Leporidae	Indian Hare or Black-naped Hare	Musal
5	<i>Loris tardigradus</i>	Lorisidae	Slender Loris	Thevanku
6	<i>Manis crassicaudata</i>	Manidae	Indian pangolin, Thick-tailed pangolin, Scaly anteater	Elunk
7	<i>Bandicota indica</i>	Muridae	Greater bandicoot rat	Perukkaan
8	<i>Petinomys fuscocapillus</i>	Sciuridae	Travancore flying squirrel, Small flying squirrel	Mayapoona
9	<i>Petaurista philippensis</i>	Sciuridae	Indian giant flying squirrel, Large brown flying squirrel, Common giant flying squirrel	Mayapoona

10	<i>Ratufa indica</i>	Sciuridae	Indian giant squirrel, Malabar giant squirrel	Malayannaan
11	<i>Moschiola indica</i>	Tragulidae	Mouse Deer	Kooruvaan
	<b>Birds</b>			
1	<i>Haliastur indus</i>	Accipitridae	Brahminy kite, Red-backed sea-eagle	Kaluk
2	<i>Ictinaetus malaiensis</i>	Accipitridae	Black eagle	Kaluk
3	<i>Pericrocotus flammeus</i>	Aegithinidae	Orange Minivet, Scarlet Minivet	Manjachootta (Female)
4	<i>Pelargopsis capensis</i>	Alcedinidae	Stork-billed kingfisher	Periyameenkothi
5	<i>Vanellus indicus</i>	Charadriidae	Red-wattled lapwing	Aalkaati
6	<i>Chalcophaps indica</i>	Columbidae	Common emerald dove, Asian emerald dove, Grey-capped emerald dove	Pachapraavu
7	<i>Coracias benghalensis</i>	Coraciidae	Indian Roller	Pokakkuruvi
8	<i>Psilopogon viridis</i>	Megalaimidae	White-cheeked barbet, Small green barbet	Thotraan
9	<i>Cinnyris lotenius</i>	Nectariniidae	Long-billed Sunbird	Chundankili
10	<i>Pycnonotus jocosus</i>	Pycnonotidae	Red-whiskered Bulbul, Red-whiskered Bulbul	Kondalathi
11	<i>Athene brama</i>	Strigidae	Spotted owl	Oolaanthi
12	<i>Glaucidium radiatum</i>	Strigidae	Jungle owl, Barred jungle owl	Oolaanthi
13	<i>Ketupa zeylonensis</i>	Strigidae	Brown fish owl	Nundkooma
14	<i>Strix ocellata</i>	Strigidae	Mottled wood owl	Muttupeethei
	<b>Fishes</b>			
1	<i>Homaloptera montana</i>	Balitoridae	Aanamalai loach/ Zig zag sucker fish	Kendameen
2	<i>Oreochromis mossambicus</i>	Cichlidae	Mozambique Tilapia	Filopi
3	<i>Dawkinsia assimilis</i>	Cyprinidae	Mascara Barb	Punnukuthi
4	<i>Dawkinsia filamentosa</i>	Cyprinidae	Black Spot Barb/ Filament barb	Punnukuthi
5	<i>Garramullya</i>	Cyprinidae	Mullyagarra	Kalloti
	<b>Reptails</b>			



1	<i>Fowlea piscator</i>	Colubridae	Asiatic Water Snake, Checkered Keelback, Water Snake	Vellapaambu
2	<i>Bungarus caeruleus</i>	Elapidae	Common Krait, Common Indian Krait, Blue Krait Indian Krait	Vellikattan
3	<i>Melanochelys trijuga</i>	Geoemydidae	Indian black turtle	Kallaama
4	<i>Lissemys punctata</i>	Trionychidae	Indian Flapshell Turtle	Paalaama
<b>Amphibians</b>				
1	<i>Duttaphrynus melanostictus</i>	Bufoidea	Asian common toad	Choriyanthavala
2	<i>Hoplobatrachus tigerinus</i>	Dicroglossidae	Indus Valley bullfrog, Indian bullfrog, Asian bullfrog, Asean bullfrog, Asia bullfrog	Pachathavala
<b>Insects and others</b>				
1	<i>Apis cerana indica</i>	Apidae	Indian honey bee	Kurunthen
2	<i>Apis florea</i>	Apidae	Dwarf honey bee, Red dwarf honey bee	Kolthen
3	<i>Tetragonula iridipennis</i>	Apidae	Indian stingless bee, Dammar bee	Koshuthen
4	<i>Gryllotalpa Sp.</i>	Gryllotalpidae	Mole cricket	Mannatta
5	Order: Isoptera	Super order: Dictyoptera	Termite	Chithal, Mazhapaatta
6	<i>Orthomorpha coarctata</i>	Paradoxosomatidae	Long-flange millipede	Uppudujaathi
7	Class: Diplopoda	Subphylum: Myriapoda	Millipedes	Cheratta
8	Class: Chilopoda	Subphylum: Myriapoda	Centipedes	kalikorna, Pazhuthaara

Table 2.14 Unique terminologies for genera by *Malasar* ethnic community

Sl.No.	Genera	Common name	Terminology of <i>Malasar</i>
	<b>Birds</b>		
1	<i>Turdoides</i>	Babbler	Pilna
	<b>Reptails</b>		
1	<i>Ahaetulla</i>	Vine Snake	Pachalakothi

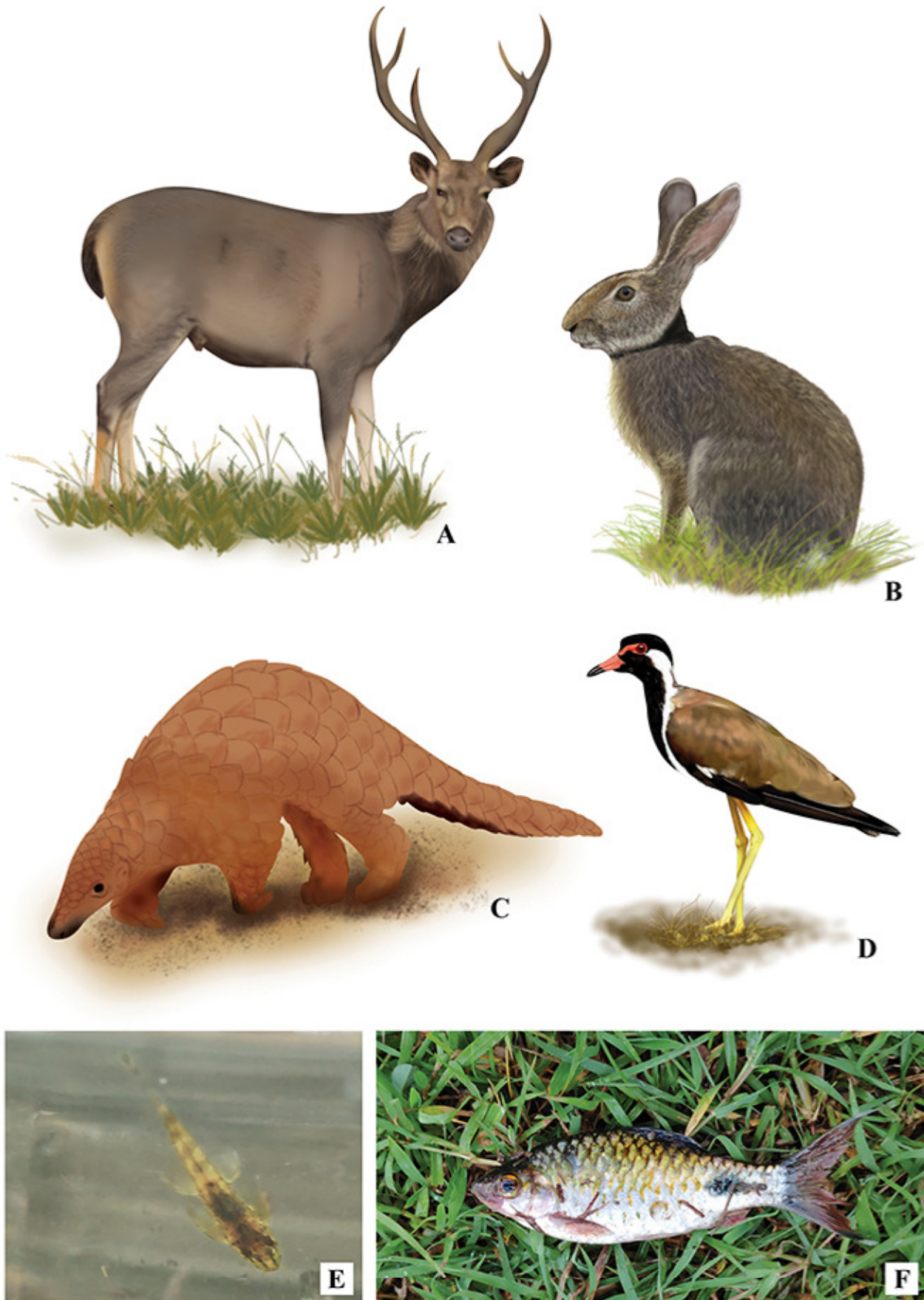
Table 2.15 Unique terminologies for the family by *Malasar* ethnic community

Sl.No.	Family	Common name	Terminology of <i>Malasar</i>
	<b>Birds</b>		
1	Apodidae	Swift	Maarikuruvi
2	Ardeidae	Egret	Vellakoeki
3	Chloropseidae	Leafbird	Pachakuruvi
4	Hemiprocnidae	Treeswift	Maarikuruvi
5	Hirundinidae	Swallow	Maarikuruvi
6	Motacillidae	Wagtail	Vaalaatikuruvi
7	Nectariniidae	Sunbird	Chuttukuruvi
8	Oriolidae	Oriole	Manjachootta



**Fig. 2.30 Ethno-faunal diversity of Malasar :** A. 'Panni' (*Sus scrofa*), B. Herd of 'Pullimaan' (*Axis axis*), C. 'Pothu' (*Bos gaurus*), D. 'Manjachootta' (*Oriolus xanthornus*), E. 'Maarikuruvi' (*Apus affinis*), F. 'Kalloti' (*Garra mullya*). C, D & E are digitally painted.





**Fig. 2.31 Unique terminologies for fauna by Malasar :** A. 'Kadamai' (*Rusa unicolor*), B. 'Musal' (*Lepus nigricollis*), C. 'Elunk' (*Manis crassicaudata*), D. 'Aalkaati' (*Vanellus indicus*), E. 'Kendameen' (*Homaloptera montana*), F. 'Punnukuthi' (*Dawkinsia filamentosa*). A, B, C & D are digitally painted.

Among the documented fauna known to *Malasar*, four species of mammals are Near Threatened (NT), seven species are Vulnerable (VU), six are Endangered (EN), one is Critically Endangered (CR) and two species are endemic to Western Ghats. Two Vulnerable (VU) and one Endangered (EN) species obtained from fishes and five Near Threatened (NT) and two Vulnerable (VU) species from reptiles.

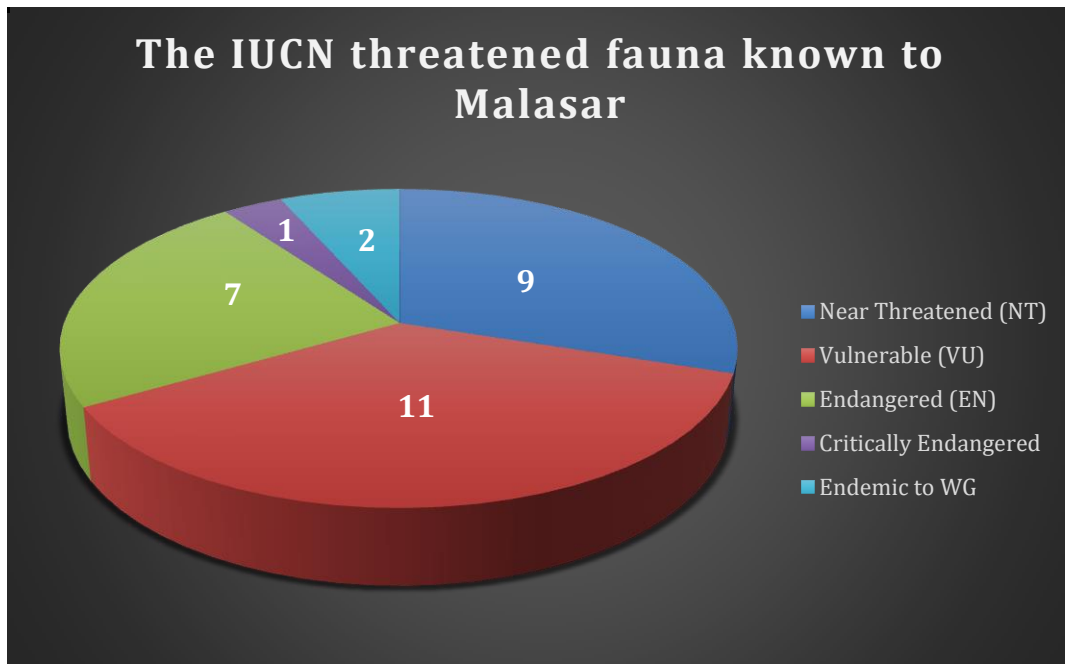


Fig. 2.32 The IUCN threatened fauna known to *Malasar*

Table 2.16 Identified threatened and endemic fauna of *Malasar* ethnic community.

Sl. No	Scientific name	Family	English name	IUCN status / Endemism
	<b>Mammals</b>			
1	<i>Bos gaurus</i>	Bovidae	Gaur	VU
2	<i>Nilgiritragus hylocrius</i>	Bovidae	NilgiriTahr	EN
3	<i>Macaca Silenus</i>	Cercopithecidae	Lion-tailed Macaque	EN
4	<i>Cuon alpinus</i>	Canidae	Wild Dog	EN
5	<i>Rusa unicolor</i>	Cervidae	Sambar Deer	VU
6	<i>Elephas maximus</i>	Elephantidae	Asian Elephant	EN
7	<i>Panthera pardus</i>	Felidae	Common Leopard	VU
8	<i>Panthera tigris</i>	Felidae	Tiger	EN
9	<i>Prionailurus rubiginosus</i>	Felidae	Rusty-spotted cat	NT



10	<i>Manis crassicaudata</i>	Manidae	Indian pangolin, Thick-tailed pangolin, Scaly anteater	EN
11	<i>Aonyx cinereus</i>	Mustelidae	Asian small-clawed otter, Oriental small- clawed otter, Small- clawed otter	VU
12	<i>Lutrogale perspicillata</i>	Mustelidae	Smooth-coated Otter	VU
13	<i>Melursus ursinus</i>	Ursidae	Sloth Bear	VU
14	<i>Paradoxurus jerdoni</i>	Viverridae	Brown palm civet, Jerdon's palm civet	LC, Endemic to WG
15	<i>Viverra civettina</i>	Viverridae	Malabar large-spotted civet, Malabar civet	CR, Endemic to WG
	<b>Birds</b>			
1	<i>Haliaeetus humilis</i>	Accipitridae	Lesser fish eagle	NT
2	<i>Haliaeetus ichthyaetus</i>	Accipitridae	Grey-headed fish eagle	NT
3	<i>Buceros bicornis</i>	Bucerotidae	Great hornbill, Concave-casqued hornbill, Great Indian hornbill, Great pied hornbill	VU
4	<i>Chloropsis cochinchinensis</i>	Chloropseidae	Blue-winged Leafbird	NT
	<b>Fishes</b>			
1	<i>Homaloptera montana</i>	Balitoridae	Aanamalai loach/ Zig zag sucker fish	EN
2	<i>Oreochromis mossambicus</i>	Cichlidae	Mozambique Tilapia	VU
3	<i>Dawkinsia assimilis</i>	Cyprinidae	Mascara Barb	VU
	<b>Reptails</b>			
1	<i>Eryx conicus</i>	Boidae	Common Sand Boa, Rough-tailed Sand Boa, Russell's Sand Boa	NT
2	<i>Eryx johnii</i>	Boidae	Red Sand Boa	NT
3	<i>Eryx whitakeri</i>	Boidae	Whitaker's Boa, Whitaker's Sand Boa	NT
4	<i>Ahaetulla dispar</i>	Colubridae	Günther's Vine Snake	NT
5	<i>Ophiophagus hannah</i>	Elapidae	King Cobra	VU
6	<i>Python molurus</i>	Pythonidae	Indian Rock Python	NT
7	<i>Crocodylus palustris</i>	Crocodylidae	Broad-snouted Crocodile, Marsh Crocodile, Mugger, Mugger Crocodile	VU

## 2.4 SUMMARY AND CONCLUSION

The Western Ghats are globally known for its biodiversity wealth. 95% of the biodiversity of Sahyadri (Western Ghats) occurs in the Anamalai hills (Nair, 1991). The *Kadar* and *Malasar* ethnic community live in the adjoining forest areas of Kerala and Tamil Nadu within the Anamalai landscape unit. The major part of *Malasar* lives in the village areas of the Palakkad district of Kerala and Coimbatore district of Tamil Nadu. The ethnobiological knowledge of these ethnic communities depending upon their inhabited area and dependency on forests for livelihood. 434 ethnofloristic nomenclature were documented from *Kadar* and 191 terminologies from *Malasar* indigenous community. Ethnofaunal nomenclature documented from *Kadar* were 302 and that from the *Malasar* community were 170. The *Kadar* community classified all the important divisions of the plant kingdom with ethnofloristic nomenclature for the groups based on their observation of plant characteristics and habitat. Whereas the *Malasar* tribe classified plant groups only into two. The communities have unique ethnic nomenclature for flora and fauna. The *Kadar* community has 253 unique ethnofloristic nomenclature and the *Malasar* has 70 terminologies. 91 unique ethnofaunal nomenclature were documented from *Kadar* and 31 from the *Malasar* community.

These terminologies help to identify and documentation of forest flora and fauna easily in the tribal areas where they use to communicate between the *Kadar* or *Malasar* language to Malayalam, Tamil and also to English. Plants seen interior to forests are not well known to outer world and many of the local names are of indigenous origin, some ethnofloristic nomenclature of *Kadar* contributed to local names of rare plants for which there were no previous local names. Their terminologies contributed to local names in plant databases and local floras. The languages of both tribes are in endangerment with the modern education system and lack of practice in the young generation. Hence this documentation

helps to preserve the ethnofloristic and ethnofaunal nomenclature of the *Kadar* and *Malasar* indigenous community.

## ***Chapter 3***

# **ETHNOECOLOGICAL KNOWLEDGE OF *KADAR* AND *MALASAR*: ETHNOMEDICINAL, ETHNOECONOMICAL, ETHNIC LIVELIHOOD AND OTHER ECOLOGICAL KNOWLEDGE RELATED WITH FLORA AND FAUNA**

## **3.1 INTRODUCTION**

The ethnic knowledge has an essential role in nourishing the natural environment, health, food security, agriculture of society, and diverse biological resources. This includes medicinal, agricultural, technical, ecological, livelihood aspects of a particular ethnic community (Pushpangadan and Nair, 2005; AICRPE report, 1992-1998, Ajani *et al.*, 2013; Gbolonyo, 2009; Grenier, 1998). One of the most important social aspects of biodiversity is the knowledge of ethnic communities. These are highly complex and interwoven with each other. Hence every ethnic knowledge is multidisciplinary and related to the immediate nature around their world view within a given ecological unit of landscape or ecosystem. In this chapter the ethnoecological knowledge related with various flora and fauna into various aspects related to the social and ecological domains are discussed. TEK is defined as “a cumulative body of knowledge, practice, and belief, evolving by adaptive processes and handed down through generations by cultural transmissions, about the relationship of living beings (including humans) with one another and with their environment” (Berkes *et al.* 2000).

## **3.2 METHODOLOGY**

The data were collected through a systematic stratified random sampling by visiting the hamlets of *Kadar* and *Malasar* ensuring 10% sampling of the population during June 2019 to September 2021 (Ackoff, 1953, Cochra, 1977; Pizadcg, 2011; Taherdoost, 2016).



Semi Structured interviews and other participatory research appraisal (PRA) methodology (Chambers and Robert, 1981, 1983, 1984; Flower *et al.*, 2000) used in understanding and validation of the ethnoecological knowledge gathered. The detailed sampling procedure is provided in chapter 1 and the schedule is given as appendix 2. The data on various flora and fauna were segregated into different kinds of ethnoecological knowledge such as ethnomedicinal, ethnoeconomical, ethnic knowledge related with livelihood and culture. These are presented in this chapter for both the communities.

### 3.3 RESULTS AND DISCUSSION

This chapter elucidated the ethnomedicinal, ethnoeconomical and ethnoecological knowledge of *Kadar* and *Malasar* community related to various flora and fauna apart from the ethnic nomenclature.

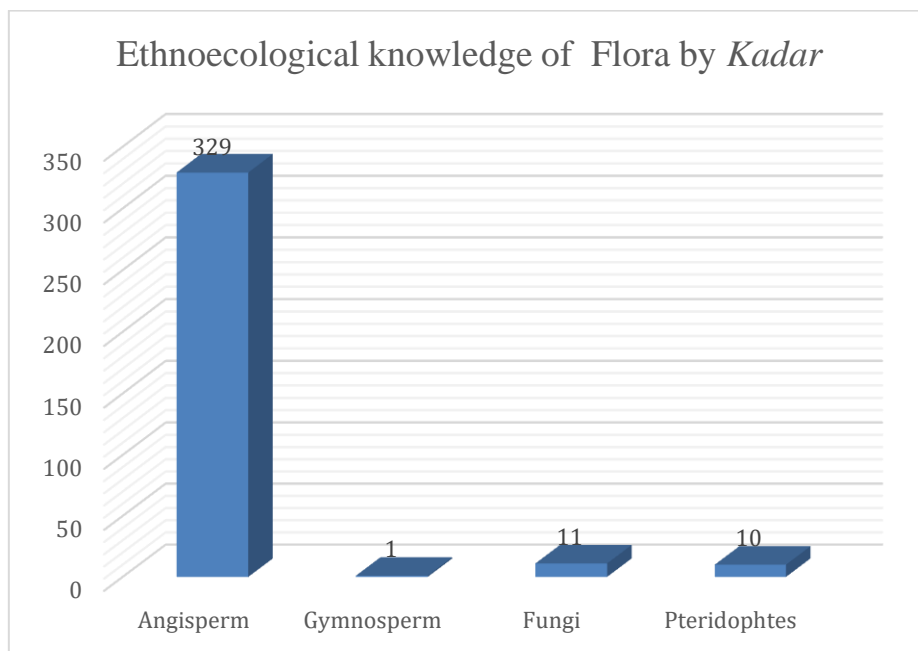


Fig. 3.1 *Kadar* Ethnoecological related with various plant groups.

Out of the total 443 plant taxa documented from the *Kadar* community, 329 taxa of Angiosperm, one Gymnosperm, Pteridophytes and 11 Fungi are linked with such ethnic

knowledge. Fourteen Mammals, 13 birds, 15 fishes, four reptiles, one amphibian and four insects have such ethnic knowledge relationships with *Kadar*.

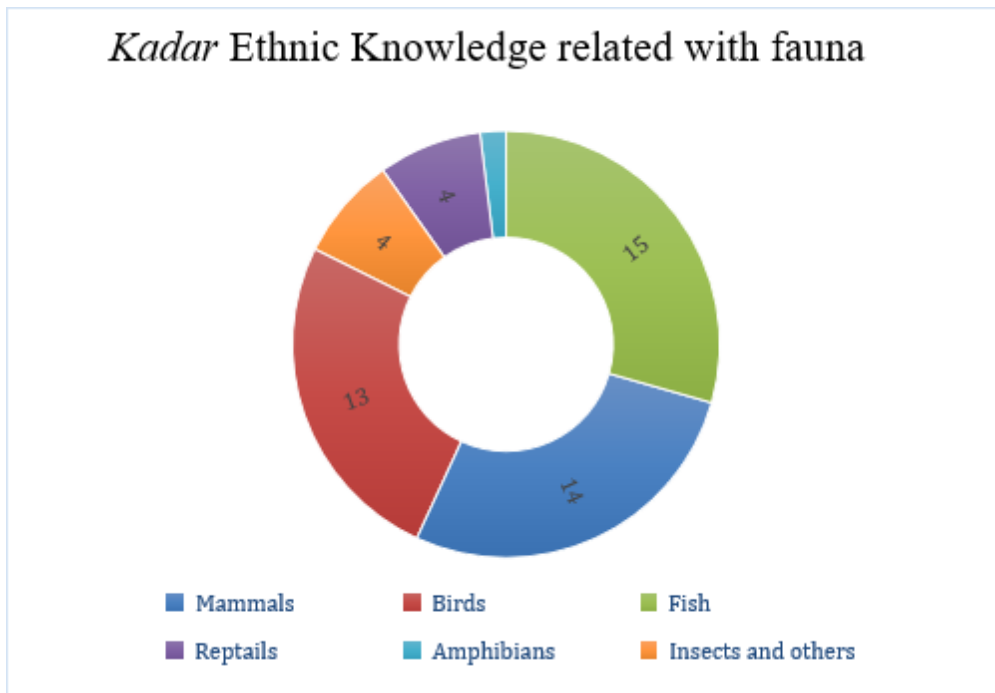


Fig. 3.2 *Kadar* Ethnoecological Knowledge related with fauna.

*Malasar* community has ethnic knowledge relationships about 181 plant taxa. Out of these 177 Angiosperms, 1 Gymnosperm, 1 Pteridophyte, and 7 Fungi are included. The *Malasar* have five mammals, five fishes and four insects with such ethnic knowledge.

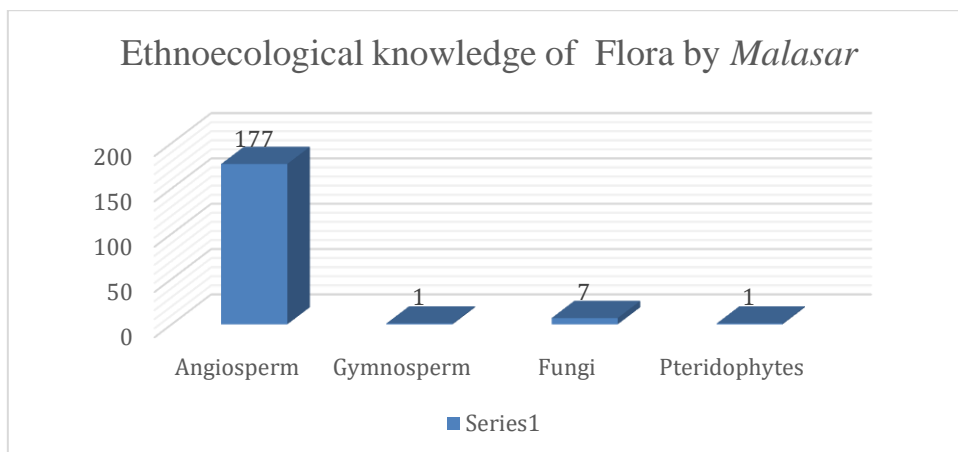


Fig. 3.3 *Malasar* Ethnic Knowledge related with various plant taxa.

### 3.3.1 Ethnomedicinal knowledge

#### 3.3.1.1 Ethnomedicinal knowledge of *Kadar*

Ethnomedicinal knowledge is hereditary wealth. It is an essential knowledge inherent within any indigenous community. This is usually related with the biogeographic region, landscape, ecosystem and the associated biota they are in. Ethnomedicinal knowledge among *Kadars* are spread across the elder men and women and transferred traditionally irrespective of the family systems. A previous documentation of the ethnomedicinal plants used by tribes of the Parambikulam region listed 139 plants (Yasodharan and Sujana, 2007) and Sabeena *et al.* (2016) 44 plants were reported. The present study documented ethnomedicinal knowledge of *Kadar* related with 128 plant taxa. The highest is from the family Fabaceae (10) followed by Zingiberaceae (8), Poaceae (7), Apocynaceae (6) and so on. The richness of Zingiberaceae indicates the *Kadar*'s relationship with evergreen forest habitats when comparing with other similar studies and ecoregions.

Table 3.1 Ethnomedicinal knowledge of *Kadar*

Sl. No	Name of the plant	Family	Terminology of <i>Kadar</i>
1	<i>Andrographis paniculata</i> (Burm.f.) Nees	Acanthaceae	Changilikurinji
2	<i>Strobilanthes alternata</i> (Burm. f.) Moylan ex J. R. I. Wood	Acanthaceae	Chikkambuvu
3	<i>Justicia gendarussa</i> Burm.f.	Acanthaceae	Vathamkolli
4	<i>Strobilanthes ciliatus</i> Wall. ex Nees	Acanthaceae	Karimkurinji
5	<i>Achyranthes aspera</i>	Amaranthaceae	Uruva chedi
6	<i>Alternanthera sessilis</i> (L.) r. Br. Ex. DC	Amaranthaceae	Ponnankanniadaaku, Komanampeeriyaaku
7	<i>Mangifera indica</i> L.	Anacardiaceae	Aadaavi manga / Mangamaram /

			Kattumoochi
8	<i>Centella asiatica</i> (L.) Urb.	Apiaceae	Vallaraaadak / Kudukkanadaaku
9	<i>Hydrocotyle javanica</i> Thunb.	Apiaceae	Kaamaalacheppu
10	<i>Peucedanum anamallayense</i> C. B. Cl.	Apiaceae	Kuntilamalli
11	<i>Alstonia scholaris</i> (L.) R. Br.	Apocynaceae	Ezhilumpalam/ Paala
12	<i>Calotropis gigantea</i> (L.) Dryand.	Apocynaceae	Erukkila
13	<i>Decalepis hamiltonii</i> Wight & Arn.	Apocynaceae	Magaalikizhangu
14	<i>Pergularia daemia</i> (Forsskal) Chiov.	Apocynaceae	Velipparuthi
15	<i>Rauvolfia serpentina</i> (L.) Benth. ex Kurz	Apocynaceae	Avalpori, Eyakundan
16	<i>Wrightia tinctoria</i> (Roxb.) R. Br.	Apocynaceae	Dhandhapaala, Thondapaala, Nelampaala
17	<i>Acorus calamus</i> L.	Araceae	Vasambu
18	<i>Amorphophallus paeoniifolius</i> (Dennst.) Nicolson	Araceae	Kattuchena, Kattuchenayadaaku
19	<i>Anaphyllum wightii</i> Schott	Araceae	Keerichena
20	<i>Rhaphidophora pertusa</i> (Roxb.) Schott	Araceae	Marachembu
21	<i>Areca catechu</i> L.	Arecaceae	Paakkmaram
22	<i>Arenga wightii</i> Griff.	Arecaceae	Pana
23	<i>Caryota urens</i> L.	Arecaceae	Pana
24	<i>Aristolochia indica</i> L.	Aristolochiaceae	Pavattathettam
25	<i>Thottea siliquosa</i> (Lam.) Ding Hou	Aristolochiaceae	Alpam
26	<i>Asparagus racemosus</i> Willd.	Asparagaceae	Vilpirithi
27	<i>Acmella calva</i> (DC.) R. K.	Compositae	Palluvedanachedi

	Jansen		
28	<i>Ageratum conyzoides</i> L.	Asteraceae	Appachappa
29	<i>Strobocalyx arborea</i> (Buch.-Ham.) Sch.Bip.	Asteraceae	Vettilakarinta
30	<i>Cyanthillium cinereum</i> (L.) H.Rob.	Asteraceae	Pavukurunal
31	<i>Ehretia aquatica</i> (Lour.) Gottschling & Hilger	Boraginaceae	Kallurvachi, Vettilavanchi
32	<i>Carica papaya</i> L.	Caricaceae	Veppasi
33	<i>Garcinia gummi-gutta</i> (L.)	Clusiaceae	Puliyotta
34	<i>Terminalia bellirica</i> (Gaertn.) Roxb.	Combretaceae	Thanni
35	<i>Terminalia chebula</i> Retz.	Combretaceae	Kadukka
36	<i>Terminalia paniculata</i> Roth.	Combretaceae	Pillamaruthu
37	<i>Citrullus colocynthis</i> (L.) Schrad.	Cucurbitaceae	Karuvilkai
38	<i>Cyperus rotundus</i> L.	Cyperaceae	Muthanga
39	<i>Dioscorea bulbifera</i> L.	Dioscoreaceae	Karrikki, Chavalu
40	<i>Diospyros montana</i> Roxb.	Ebenaceae	Vakkanamaram
41	<i>Erythralum scandens</i> Bl.	Erythralaceae	Pulluvallikodi
42	<i>Acalypha fruticosa</i> Forssk.	Euphorbiaceae	Murithaali
43	<i>Macaranga indica</i> Wight	Euphorbiaceae	Thuyilmooki, Vatakkanni
44	<i>Macaranga peltata</i> (Roxb.) Müll. Arg.	Euphorbiaceae	Vatta
45	<i>Mallotus philippensis</i> (Lam.) Müll. Arg.	Euphorbiaceae	Sindooramaram
46	<i>Albizia procera</i> (Roxb.) Benth.	Fabaceae	Vella nama, Vella vakka
47	<i>Guilandina bonduc</i> L.	Fabaceae	Kalanchi, Chalinchi



48	<i>Cassia fistula</i> L.	Fabaceae	Kontamaram
49	<i>Dalbergia latifolia</i> Roxb.	Fabaceae	Veetti
50	<i>Entada rheedii</i> Spreng.	Fabaceae	Theylakodi
51	<i>Pongamia pinnata</i> (L.) Pierre	Fabaceae	Ungu, Punku
52	<i>Mimosa pudica</i> L.	Fabaceae	Thottavaadi / Thottasukki
53	<i>Pterocarpus marsupium</i> Roxb.	Fabaceae	Venga/ Benga / Vengachora/ Vengapala
54	<i>Senna occidentalis</i> (L.) Link	Fabaceae	Kolthakara
55	<i>Zornia gibbosa</i> Span.	Fabaceae	Murikooti
56	<i>Ocimum americanum</i> L.	Lamiaceae	Kaattuthulasi
57	<i>Tectona grandis</i> L. f.	Lamiaceae	Thekkumaram
58	<i>Careya arborea</i> Roxb.	Lecythidaceae	Pekumaram
59	<i>Lagerstroemia lanceolata</i> Wall.	Lythraceae	Veyaavu / Vezhaavu / Beyaavu
60	<i>Helicteres isora</i> L.	Malvaceae	Chenari, Kaivan
61	<i>Sida acuta</i> Burm. f.	Malvaceae	Kurunthotti
62	<i>Sida alnifolia</i> L.	Malvaceae	Kooraankurunthotti
63	<i>Sida rhombifolia</i> L.	Malvaceae	Kurunthotti
64	<i>Indianthus virgatus</i> (Roxb.) Suksathan & Borchs.	Marantaceae	Vellakoova
65	<i>Azadirachta indica</i> A. Juss.	Meliaceae	Veppu
66	<i>Coscinium fenestratum</i> (Gaertn.) Colebr.	Menispermaceae	Maramanjalkodi
67	<i>Cyclea peltata</i> Hook. f. & Thoms.	Menispermaceae	Paadaveru/ Padakiyangu
68	<i>Diploclisia glaucescens</i> (Bl.) Diels	Menispermaceae	Chilanthikizhangu
69	<i>Ficus tinctoria</i> G. Forst.	Moraceae	Paraveeti

70	<i>Musa Kattuvazhana</i> K.C.Jacob	Musaceae	Cholavaazha
71	<i>Ensete superbum</i> (Roxb.) Cheesman	Musaceae	Kuntavaazha
72	<i>Psidium guajava</i> L.	Myrtaceae	KoyyaKaayi/ Pera
73	<i>Syzygium cumini</i> (L.) Skeels.	Myrtaceae	Nara
74	<i>Myxopyrum smilacifolium</i> (Wall.) Blume	Oleaceae	Chathuramulla/ Chathurakkodi
75	<i>Vanda thwaitesii</i> Hook. f.	Orchidaceae	Kallola, Marayola
76	<i>Passiflora edulis</i> Sims	Passifloraveae	Mudichipalam
77	<i>Baccaurea courtallensis</i> (Wight) Müll. Arg.	Phyllanthaceae	Oovathan
78	<i>Phyllanthus amarus</i> Schum. & Thonn.	Phyllanthaceae	Keezharnelli
79	<i>Phyllanthus emblica</i> L.	Phyllanthaceae	Nellika
80	<i>Phyllanthus rheedei</i> Wight	Phyllanthaceae	Keezharnelli
81	<i>Piper barberi</i> Gamble.	Piperaceae	Kattukurumulak
82	<i>Piper longum</i> L.	Piperaceae	Thuppali/Thuppili/Thippil i
83	<i>Piper peepuloides</i> Roxb.	Piperaceae	Kattukurumulak
84	<i>Piper nigrum</i> L.	Piperaceae	Kurumulak
85	<i>Pittosporum neelgherrense</i> Wight & Arn.	Pittosporaceae	Analivenga
86	<i>Bambusa bambos</i> (L.) Voss	Poaceae	Mula
87	<i>Cymbopogon citratus</i> (DC.) Stapf	Poaceae	Thailappullu
88	<i>Dendrocalamus strictus</i> (Roxb.)	Poaceae	Mula
89	<i>Ochlandra setigiera</i> Gamble	Poaceae	Velleetta
90	<i>Ochlandra travancorica</i> (Bedd.) Benth	Poaceae	Kaareetta

91	<i>Pseudoxytenanthera bourdillonii</i>	Poaceae	Arayambu
92	<i>Schizostachyum beddomei</i>	Poaceae	Noonjooru
93	<i>Clematis zeylanica</i> (L.) Poir.	Ranunculaceae	Eruppakodi/Vathakodi / Chalikkodi
94	<i>Ziziphus oenoplia</i> (L.) Miller	Rhamnaceae	Choorimullu
95	<i>Ziziphus rugosa</i> Lam.	Rhamnaceae	Choorimullu
96	<i>Adina cordifolia</i> (Roxb.) Brandis	Rubiacea	Kudala / Chudala
97	<i>Mitragyna parvifolia</i> (Roxb.) Korth.	Rubiacea	Chudalamaram
98	<i>Ophiorrhiza mungos</i> L.	Rubiacea	Keeripacha
99	<i>Rubia cordifolia</i> L.	Rubiacea	Murikodi
100	<i>Toddalia asiatica</i> (L.) Lam.	Rutaceae	Puliyorumullu
101	<i>Cardiospermum halicacabum</i> L.	Sapindaceae	Modakkittanaadaak
102	<i>Harpullia arborea</i> (Blanco) Radlk.	Sapindaceae	Puzhukkolli/ Chittilamadaku
103	<i>Schleichera oleosa</i> (Lour.) Oken	Sapindaceae	Kuntilapooaan
104	<i>Solanum americanum</i> Mill.	Solanacea	Chikkuttiadaaku / Kaataankutiadaaku / Kakayadaaku
105	<i>Solanum nigrum</i> L.	Solanacea	Chikkuttiadaaku / Kaataankutiadaaku / Kakayadaaku
106	<i>Sterculia guttata</i> Roxb.	Sterculiaceae	Thondi, Peenari
107	<i>Grewia tiliifolia</i> Vahl	Tiliaceae	Chadachi / Unnam
108	<i>Dendrocnide sinuata</i> (Bl.) Chew	Urticacea	Aanathondi / Piyang / Chudukolu
109	<i>Clerodendrum infortunatum</i> L.	Verbenaceae	Perukinthali
110	<i>Cissus quadrangularis</i> L.	Vitaceae	Pirasal
111	<i>Curcuma aromatica</i> Salisb.	Zingiberaceae	Manjakoova
112	<i>Curcuma longa</i> L.	Zingiberaceae	Manjal

113	<i>Curcuma neilgherensis</i> Wight.	Zingiberaceae	Vellakoova
114	<i>Elettaria cardamomum</i> (L.) Maton	Zingiberaceae	Elam
115	<i>Hedychium coronarium</i> J. Koenig	Zingiberaceae	Aanachukku
116	<i>Kaempferia galanga</i> L.	Zingiberaceae	Poolaankiyaang
117	<i>Zingiber officinale</i> Rose.	Zingiberaceae	Inji
118	<i>Zingiber zerumbet</i> (L.) J.E Smith	Zingiberaceae	Kattinji
119	<i>Ganoderma lucidum</i> (Curtis) P.	Ganodermataceae	Marakumin
120	Plurotus sp.	Lentinaceae	Marakumin
121	Angiopteris spp.	Angiopteridaceae	KidangAadaak
122	<i>Asplenium phyllitidis</i> D. Don	Aspliniaceae	Marappanna
123	<i>Aglaomorpha quercifolia</i> (L.) Hovenkamp & S. Linds.	Polypodiaceae	Ulayalavalli, Kellola
124	<i>Drynaria quercifolia</i> (L.) J. Sm.	Polypodiaceae	Ulayalavalli
125	<i>Pyrrosia lanceolata</i> (L.) Farw.	Polypodiaceae	Thiriyan
126	<i>Actiniopteris radiata</i> (Koenig ex Sw.) Link	Pteridaceae	Kallupana
127	<i>Adiantum philippense</i> L.	Pteridaceae	Kathirpanna
128	<i>Parahemionitis cordata</i> (Roxb. ex Hook. & Grev.) Fraser- Jenkins	Pteridaceae	Elichevi

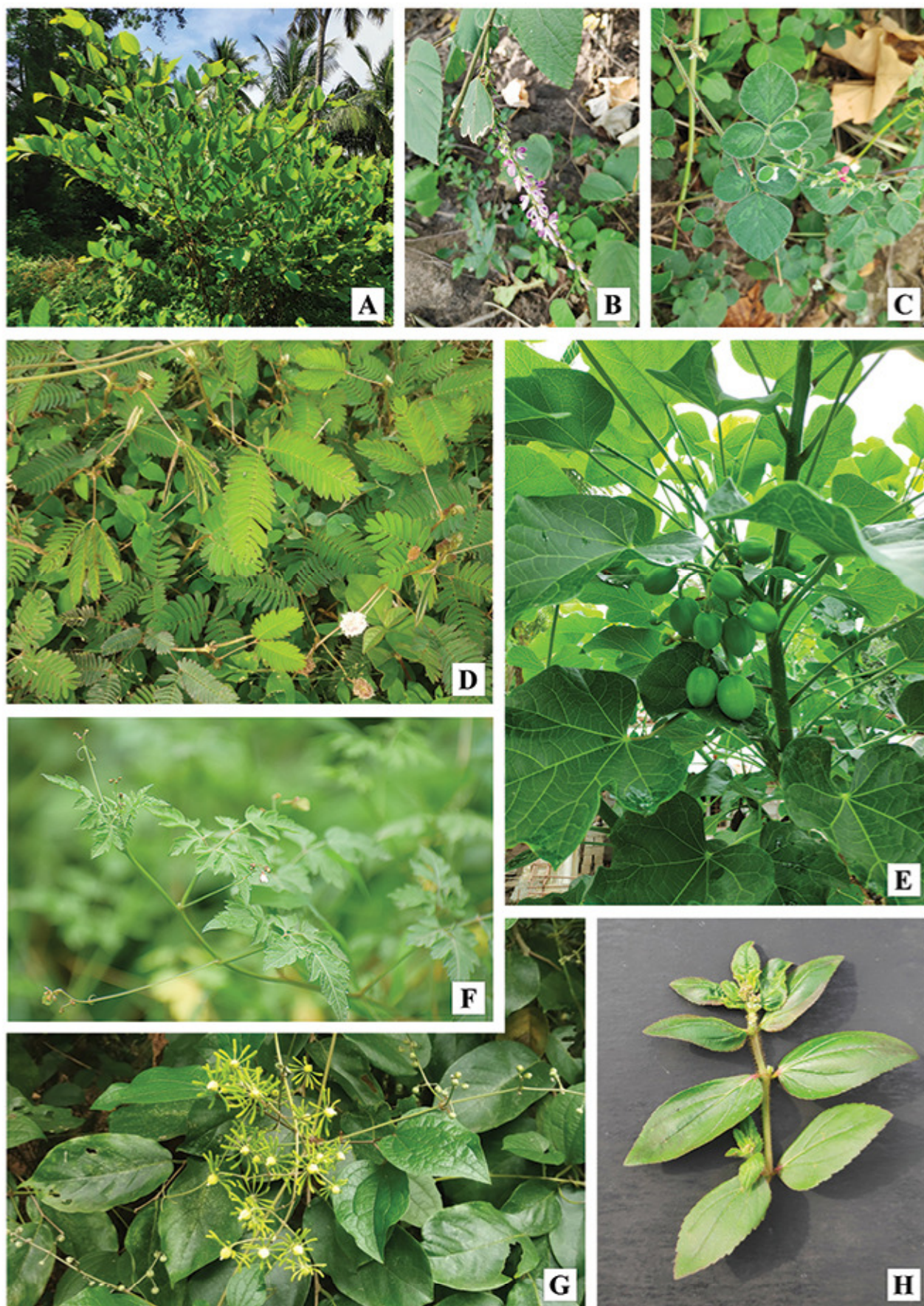
### 3.3.1.2 Ethnomedicinal knowledge of *Malasar*

There are many medicinal plants used by the Malasar community. They usually collect medicinal plants for different Ayurveda companies as a mean of their livelihood. Some of the earliest studies like Medicinal plants used by the Malasar tribe in the Coimbatore district by Kumar *et al.*, (2007) reported 51 plants whereas the present study documented 71 medicinal plants.



**Fig. 3.4** Ethnomedicinal knowledge of *Kadar* : A. 'Paadaveru' (*Cyclea peltata*), B. 'Pavattathettam' (*Aristolochia indica*), C. 'Veppasi' (*Carica papaya*), D. 'Kaamaalachappu' (*Hydrocotyle javanica*), E. 'Kontamaram' (*Cassia fistula*), F. 'Vathamkolli' (*Justicia gendarussa*).





**Fig. 3.5** Ethnomedicinal knowledge of Malasar : A. 'Orela' (*Pleurolobus gangeticus*), B. *Pleurolobus gangeticus* inflorescence, C. 'Mukala' (*Pseudarthria viscida*), D. 'Thottasukki' (*Mimosa pudica*), E. 'Kotta' (*Jatropha curcas*), F. 'Niravalli' (*Cardiospermum halicacabum*), G. 'Vaathakodi' (*Clematis zeylanica*), H. 'Murikooti' (*Euphorbia hirta*).

Table 3.2 Ethnomedicinal knowledge of *Malasar*

Sl. No.	Name of the Plant	Family	Terminology of <i>Malasar</i>
1	<i>Justicia beddomei</i> (C. B. Clarke) Bennet	Acanthaceae	Adalodakam
2	<i>Ruellia prostrata</i> Poir.	Acanthaceae	Thuppalupadakkam
3	<i>Strobilanthes alternata</i> (Burm. f.) Moylan ex J. R. I. Wood	Acanthaceae	Murikootti
4	<i>Achyranthes aspera</i> L.	Amaranthaceae	Oorankaya chedi
5	<i>Achyranthes aspera</i> var. <i>porphyristachya</i> (Wall. ex Moq.) Hook. f.	Amaranthaceae	Oorankaya chedi
6	<i>Achyranthes aspera</i> var. <i>pubescens</i> (Moq.) M. Gómez	Amaranthaceae	Oorankaya chedi
7	<i>Alternanthera sessilis</i> (L.) R. Br. ex DC.	Amaranthaceae	Ponnamkannikkeera / Meenamkannikkeera
8	<i>Mangifera indica</i> L.	Anacardiaceae	Kattumanga
9	<i>Centella asiatica</i> (L.) Urb.	Apiaceae	Vallaralakri / Masthishkalakri
10	<i>Alstonia scholaris</i> (L.) R. Br.	Apocynaceae	Ezhilumpalam/ Paala
11	<i>Calotropis gigantea</i> (L.) W. T. Aiton	Apocynaceae	Erukku
12	<i>Decalepis hamiltonii</i> Wight & Arn.	Apocynaceae	Magaalikizhangu / Magaalikilangu
13	<i>Decalepis salicifolia</i> Bed. ex Venter	Apocynaceae	Magaalikizhangu / Magaalikilangu
14	<i>Hemidesmus indicus</i> (L.) R. Br.	Apocynaceae	Nannari
15	<i>Wrightia tinctoria</i> (Roxb.) R. Br.	Apocynaceae	Dhandhapaala
16	<i>Asparagus racemosus</i> Willd.	Asparagaceae	shathavalli / Chathavalli
17	<i>Chromolaena odorata</i> (L.) R. M. King & H. Rob.	Asteraceae	Communist-pacha

18	<i>Cyanthillium cinereum</i> (L.) H. Rob.	Asteraceae	Poovamkurunal
19	<i>Eclipta prostrata</i> (L.) L.	Asteraceae	Kanjunni
20	<i>Sphaeranthus indicus</i> L.	Asteraceae	Kottakaranda
21	<i>Tridax procumbens</i> L.	Asteraceae	Murikuti
22	<i>Ehertia aquatica</i> (Lour.) Gottschling & Hilger	Boraginaceae	Kallurvachi
23	<i>Carica papaya</i> L.	Caricaceae	Pappali
24	<i>Salacia reticulata</i> Wight	Celastraceae	Ekanayakam
25	<i>Terminalia arjuna</i> (Roxb. ex DC.) Wight & Arn.	Combretaceae	Neermaruth
26	<i>Terminalia bellirica</i> (Gaertn.) Roxb.	Combretaceae	Thannimaram
27	<i>Terminalia chebula</i> Retz.	Combretaceae	Kadukka
28	<i>Dillenia pentagyna</i> Roxb.	Dilleniaceae	Naithekku / Pattipunna
29	<i>Euphorbia hirta</i> L.	Euphorbiaceae	Murikootti
30	<i>Ricinus communis</i> L.	Euphorbiaceae	Avanakku
31	<i>Jatropha curcas</i> L.	Euphorbiaceae	Kotta
32	<i>Vachellia nilotica</i> (L.) P. J. H. Hurter & Mabb.	Fabaceae	Karivelum
33	<i>Clitoria ternatea</i> L.	Fabaceae	Sankupushpum
34	<i>Dalbergia latifolia</i> Roxb.	Fabaceae	Veetti
35	<i>Pleurolobus gangeticus</i> (L.) J. St.-Hil. ex H. Ohashi & K. Ohashi	Fabaceae	Orela
36	<i>Entada rheedei</i> Spreng.	Fabaceae	Thaylakaay
37	<i>Mimosa pudica</i> L.	Fabaceae	Thottavaadi / Thottasukki
38	<i>Pongamia pinnata</i> L.	Fabaceae	Punku
39	<i>Pseudarthria viscida</i> (L.) Wight & Arn.	Fabaceae	Mukala



40	<i>Pterocarpus marsupium</i> Roxb.	Fabaceae	Venga
41	<i>Curculigo orchioides</i> Gaertn.	Hypoxidaceae	Nilappana
42	<i>Leucas aspera</i> (Willd.) Link	Lamiaceae	Thumba
43	<i>Ocimum tenuiflorum</i> L.	Lamiaceae	Thulasi
44	<i>Coleus barbatus</i> (Andrews) Benth. ex G. Don	Lamiaceae	Kanakoorka
45	<i>Vitex negundo</i> L.	Lamiaceae	Karinochi
46	<i>Strychnos nux-vomica</i> L.	Loganiaceae	kanjiram
47	<i>Helicteres isora</i> L.	Malvaceae	Edampiri-Valampiri
48	<i>Thespesia populnea</i> (L.) Sol. ex Corrêa	Malvaceae	Poovarasu
49	<i>Sida alnifolia</i> L.	Malvaceae	Kurunthotti
50	<i>Sida rhombifolia</i> L.	Malvaceae	Kurunthotti
51	<i>Azadirachta indica</i> A. Juss.	Meliaceae	Veppu
52	<i>Cissampelos Pareira</i> L.	Menispermaceae	Janamkolli
53	<i>Tinospora cordifolia</i> (Willd.) Hook. f. & Thomson	Menispermaceae	Chittamruth
54	<i>Moringa oleifera</i> Lam.	Moringaceae	Muringai
55	<i>Ensete superbum</i> (Roxb.) Cheesman	Musaceae	Kalluvazha
57	<i>Psidium guajava</i> L.	Myrtaceae	KoyyaKaayi
58	<i>Boerhavia diffusa</i> L.	Nyctaginaceae	Thamizhama / Komanamberilakri
59	<i>Benstonea foetida</i> (Roxb.) Callm. & Buerki	Pandanaceae	Kaithauzhi
60	<i>Phyllanthus emblica</i> L.	Phyllanthaceae	Nellika
61	<i>Peperomia pellucida</i> (L.) Kunth	Piperaceae	Vellathandu
62	<i>Piper peepuloides</i> Roxb.	Piperaceae	Kattukurumulak
63	<i>Piper longum</i> L.	Piperaceae	Thippali

64	<i>Piper nigrum</i> L.	Piperaceae	Kurumulakai
65	<i>Bambusa bambos</i> (L.) Voss	Poaceae	Mula
66	<i>Clematis zeylanica</i> (L.) Poir.	Ranunculaceae	Vathakodi
67	<i>Ziziphus glabrata</i> (B.Heyne ex Schult.) B. Heyne ex Wight & Arn.	Rhamnaceae	Kottamaram
68	<i>Cardiospermum halicacabum</i> L.	Sapindacea	Uzhinja / Niravalli
69	<i>Capsicum frutescens</i> L.	Solanacea	Kanthari
70	<i>Datura metel</i> L.	Solanacea	Oomanthai
71	<i>Aloe vera</i> (L.) Burm. f.	Xanthorrhoeacea e	Kattarvazha
72	<i>Zingiber neesatum</i> (J.Graham) Ramamoorthy	Zingiberaceae	Malayinji
73	<i>Zingiber officinale</i> Roscoe	Zingiberaceae	Inji

### 3.3.2 Ethnic knowledge related with livelihood and culture

#### 3.3.2.1 Ethnic knowledge related with livelihood and culture of Kadar

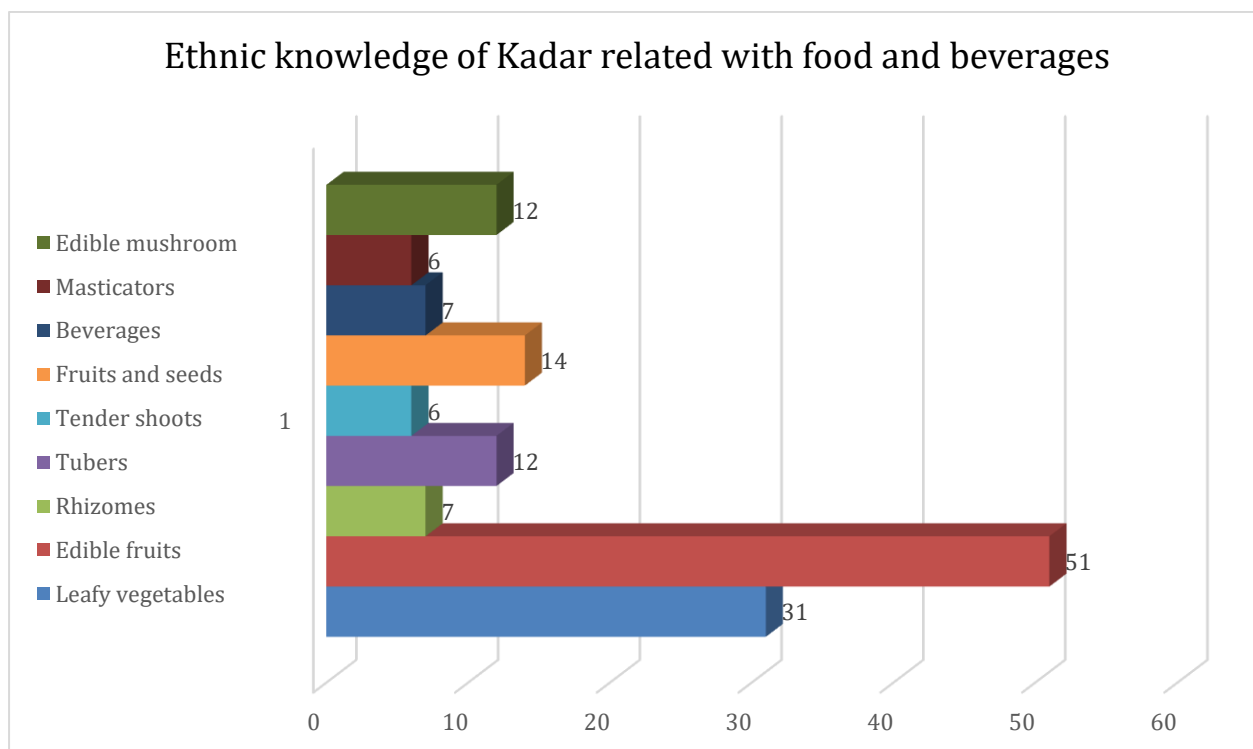




Fig.3.6 Ethnic knowledge of *Kadar* related with food and beverages.

The *Kadar* ethnic community has specific knowledge regarding their culture and livelihood which makes them distinguished from other ethnic communities. Among *Kadar* they use 51 edible fruits, 31 leafy vegetables, 14 seeds, 12 tubers, seven rhizomes, six tender shoots as vegetables, seven beverages and six masticators. Here, 38% of their food were comprised of edible fruits in which the most commonly used are *Artocarpus hirsutus* (Wild Jack fruit) *Garcinia gummi-gutta* (Pot tamarind), *Ficus racemosa* (Cluster fig), *Flacourtia montana* (Wild Indian coffee plum), *Madhuca neriifolia* (Wild Mahua), *Musa paradisiaca* (Banana), *Syzygium aqueum* (Watery Rose apple), *Baccaurea courtallensis*, *Phyllanthus emblica* (Gooseberry) etc. The leafy vegetables contribute 23% in to their food habits, which includes *Solanum nigrum*, *Amaranthus caudatus*, *Centella asiatica*, *Colocasia esculenta*, *Cynanchum annularium*, *Anaphyllum wightii*, *Sesbania grandiflora*, *Oxalis corniculata* etc. They also consume seeds of *Cullenia exarillata*, *Bambusa bambos*, *Elettaria cardamomum*, *Cycas circinalis*. Some of the tubers like *Dioscorea alata*, *Decalepis hamiltonii*, *Asparagus racemosus*, *Dioscorea bulbifera*, are the important wild food sources. Tender shoots of different bamboos and wild palms such as *Bambusa bambos*, *Pinanga dicksonii*, *Pseudoxytenanthera bourdillonii*, *Dendrocalamus strictus*, *Arenga wightii*, *Caryota urens* are used as vegetables. *Caryota urens*, *Arenga wightii*, *Ehretia aquatica*, *Syzygium cumini*, *Hemidesmus indicus* are part of their beverages. Rhizomes of wild gingers and turmeric such as *Zingiber officinale*, *Colocasia esculenta*, *Curcuma aromatica*, *Anaphyllum wightii*, *Amorphophallus commutatus* are also used.

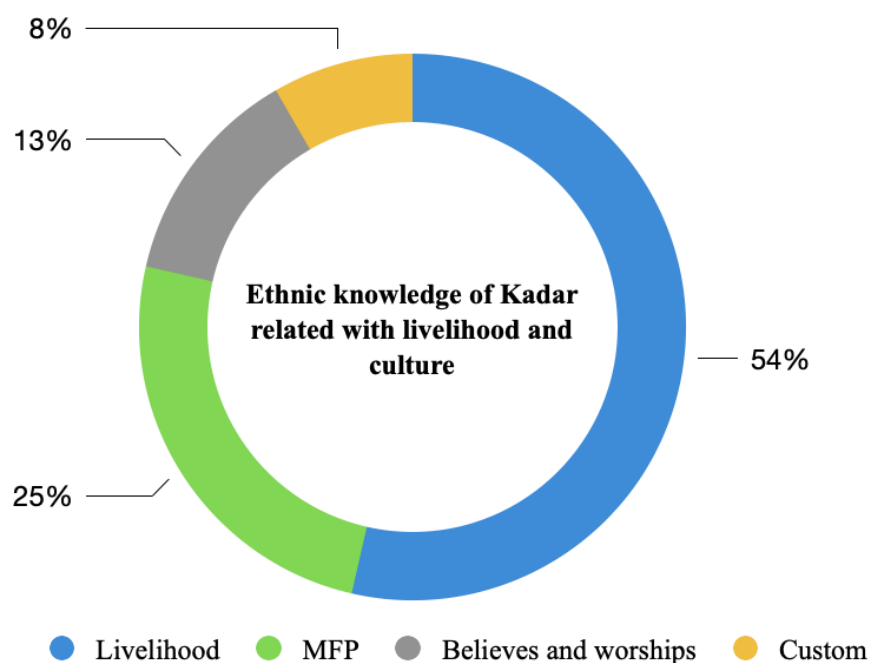
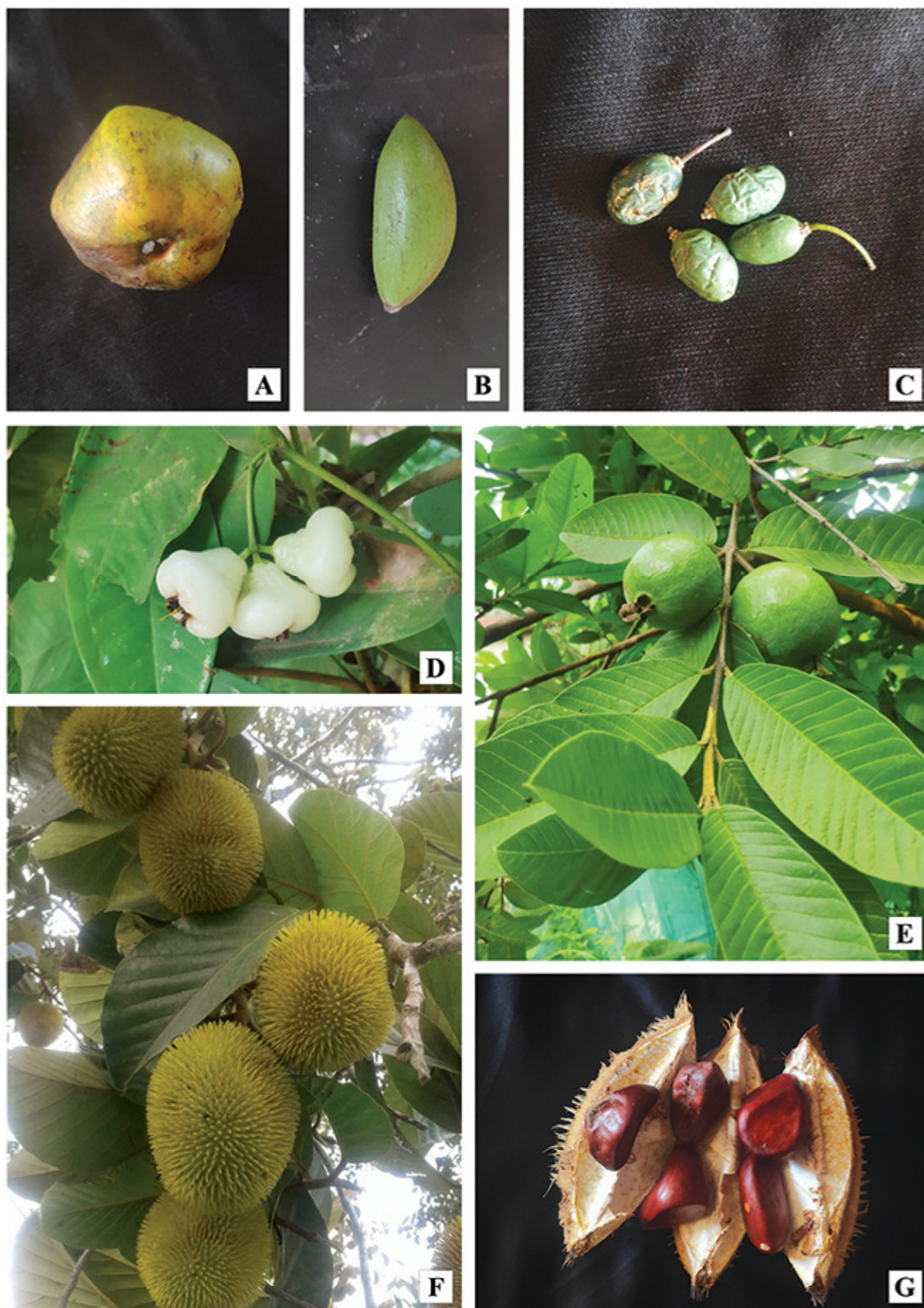


Fig. 3.7 Ethnic knowledge of *Kadar* related with livelihood and culture.

The livelihood and cultural knowledge serve a significant part in the ethnoecological knowledge of *Kadar*. The present study reveals that the *Kadar* ethnic community usually use nearly 45 plant species for their livelihood, followed by 21 Minor Forest Produce (MFPs), 11 species related with their believes and worships and seven for their traditional custom. The ethnic livelihood contributes 54% in which MFPs like *Garcinia gummi-gutta*, *Terminalia chebula*, *Terminalia bellirica*, *Canarium strictum*, *Vateria indica*, *Piper nigrum*, *Calamus thwaitesii*, *Curcuma aromatica* serves as a major part of their life contributing to their economy. *Ficus benghalensis*, *Ficus racemosa*, *Ficus religiosa*, *Azadirachta indica*, *Alstonia scholaris*, etc... are a part of their worships and believes. *Kadar* has their own customs and mythologies where they provide special consideration for certain plant species like *Calotropis gigantea*, *Mangifera indica*, *Azadirachta indica*, *Canarium strictum*, *Curcuma longa* and *Cycas circinalis*.



**Fig.3.8** Edible fruits and seeds used by *Kadars* : A. 'Noolanga' (*Donella lanceolata*), B. 'Paali' (*Palaquium ellipticum*), C. 'Kullanagara' (*Elaeocarpus munronii*), D. 'Javvakoyya' (*Syzygium aqueum*), E. 'Koyyakaaya' (*Psidium guajava*), F. 'Ayanni' (*Artocarpus hirsutus*), G. 'Kaaraani' (*Cullenia exarillata*).





**Fig.3.9** Edible tubers used by *Kadars* : A. 'Shjelu thettam' (*Dioscorea tomentosa*), B. 'Chekavan' (*Dioscorea intermedia*), C. 'Irathettam', 'Kanal' (*Dioscorea oppositifolia*), D. 'Karriikki' / 'Chavalu' (*Dioscorea bulbifera*), E. 'Nerathettam' (*Dioscorea alata*).

Table 3.3 Leafy vegetables used by *Kadar*.

Sl. No	Name of the plant	Family	Terminology of <i>Kadar</i>
1	<i>Alternanthera sessilis</i> (L.) R. Br. ex DC	Amaranthaceae	Ponnankanniadaaku, Komanampeeriyaadaaku
2	<i>Amaranthus caudatus</i> L.	Amaranthaceae	Aadak
3	<i>Amaranthus spinosus</i> L.	Amaranthaceae	Mullanadaak
4	<i>Amaranthus tricolor</i> L.	Amaranthaceae	ChethathandaliMullanadak
5	<i>Amaranthus viridis</i> L.	Amaranthaceae	Pattiaadak
6	<i>Celosia argentea</i> L.	Amaranthaceae	Panna adaaku
7	<i>Centella asiatica</i> (L.) Urb.	Apiaceae	Vallaraaadak / Kudukkanadaaku
8	<i>Eryngium foetidum</i> L.	Apiaceae	Aanamalli
9	<i>Cynanchum annularium</i> (Roxb.) Liede & Khanum	Apocynaceae	Paaladaaku
10	<i>Amorphophallus commutatus</i> (Schott) Engl.	Araceae	Kattuchena, Kattuchenayadaaku
11	<i>Amorphophallus paeoniifolius</i> (Dennst.) Nicolson	Araceae	Kattuchena, Kattuchenayadaaku
12	<i>Anaphyllum wightii</i> Schott	Araceae	Keerichena
13	<i>Colocasia esculenta</i> (L.) Schott	Araceae	Chembaadaak / Chembukilangu
14	<i>Carica papaya</i> L	Caricaceae	Veppasi
15	<i>Senna occidentalis</i> (L.)	Fabaceae	Kolthakara
16	<i>Senna tora</i> (L.) Roxb.	Fabaceae	Thakaraadak, Chakkarathakara, Kummattithakarayadaaku
17	<i>Sesbania grandiflora</i> (L.) Pers.	Fabaceae	Agathiaadaak
18	<i>Vigna vexillata</i> (L.) A. Rich.	Fabaceae	Avara



19	<i>Moringa oleifera</i> Lam.	Moringaceae	Muringa
20	<i>Oxalis corniculata</i> L.	Oxalidaceae	Puliyadaaku
21	<i>Adenia hondala</i> (Gaertn.) de Wilde	Passifloraceae	Kannanadaaku
22	<i>Piper umbellatum</i> L.	Piperaceae	Thiriyadaaku
23	<i>Persicaria chinensis</i> (L.)	Polygonaceae	Odimadavalinayadaaku
24	<i>Portulaca oleracea</i> L.	Portulacaceae	Pollathandanadaaku
25	<i>Solanum americanum</i> Mill.	Solanaceae	Chikkuttiadaaku / Kaataankutiadaaku / Kakayadaaku
26	<i>Solanum nigrum</i> L.	Solanaceae	Chikkuttiadaaku / Kaataankutiadaaku / Kakayadaaku
27	<i>Laportea interrupta</i> (L.) Chew.	Urticaceae	Thuvaadaaku
28	<i>Cycas circinalis</i> L.	Cycadaceae	Eenthadaaku
29	<i>Angiopteris</i> spp.	Angiopteridaceae	Kidangaadaak
30	<i>Diplazium esculentum</i> (Retz.) Sw.	Athyriaceae	Suruliadaaku
31	<i>Lemmaphyllum microphyllum</i> C. Presl	Polypodiaceae	Kodipanna

Table 3.4 Edible fruits used by *Kadar*.

Sl. No	Name of the plant	Family	Terminology of <i>Kadar</i>
1	<i>Spondias pinnata</i> (L.f.) Kurz.,	Anacardiaceae	Ambazham
2	<i>Colocasia esculenta</i> (L.) Schott in Schott.	Araceae	Chembaadaak / Chembukilangu
3	<i>Calamus hookerianus</i> Becc.	Arecaceae	Vallichooral

4	<i>Calamus thwaitesii</i> Becc.	Arecaceae	Ponthichooral
5	<i>Cocos nucifera</i> L.	Arecaceae	Thengamaram/thengu
6	<i>Cordia dichotoma</i> G.Forst.	Boraginaceae	Thumbapazham
7	<i>Cordia wallichii</i> G. Don,	Boraginaceae	Viri
8	<i>Opuntia dillenii</i> (Ker Gawl.) Haw	Cactaceae	Mullukallipazham
9	<i>Mesua ferrea</i> L.	Calophyllaceae	Naavu, Naangu
10	<i>Carica papaya</i> L	Caricaceae	Veppasi
11	<i>Garcinia gummi-gutta</i> (L.)	Clusiaceae	Puliyotta
12	<i>Argyreia nervosa</i> (Burm. fil.) Bojer	Convolvulaceae	Onkattapazham
13	<i>Momordica dioica</i> Roxb. ex Willd.	Cucurbitaceae	Kattupaval
14	<i>Elaeocarpus munronii</i> (Wl.) Masters	Elaeocarpaceae	Kullanagara
15	<i>Elaeocarpus serratus</i> L.	Elaeocarpaceae	Nagara
16	<i>Tamarindus indica</i> L.	Fabaceae	Puli
17	<i>Vigna vexillata</i> (L.)A.Rich.	Fabaceae	Avara
18	<i>Artocarpus heterophyllus</i> Lam.	Moraceae	Chakkamaram/ plaavu
19	<i>Artocarpus hirsutus</i> Lam.	Moraceae	Ayanni
20	<i>Artocarpus altilis</i> (Parkinson) Fosberg	Moraceae	Kadachakka
21	<i>Ficus hispida</i>	Moraceae	Thondi
22	<i>Ficus racemosa</i> L.	Moraceae	Athi / Maraavu
23	<i>Moringa oleifera</i> Lam.	Moringaceae	Muringa
24	<i>Musa paradisiaca</i> L.	Musaceae	Vaazha
25	<i>Ensete superbum</i> (Roxb.) Cheesman	Musaceae	Kuntavaazha
26	<i>Psidium guajava</i> L.	Myrtaceae	KoyyaKaayi/ Pera

27	<i>Syzygium aqueum</i> (Burm. f.) Alston	Myrtaceae	Javvakoyya
28	<i>Syzygium cumini</i> (L.) Skeels.	Myrtaceae	Nara
29	<i>Syzygium gardneri</i> Thw.	Myrtaceae	Arinara
30	<i>Syzygium mundagam</i> (Bourd.) Chitra	Myrtaceae	Nara
31	<i>Passiflora edulis</i> Sims	Passifloraceae	Mudichipalam
32	<i>Baccaurea courtallensis</i> (Wight) Müll. Arg.	Phyllanthaceae	Oovathan
33	<i>Bridelia retusa</i> (L.) A. Juss.	Phyllanthaceae	Mulluvenga
34	<i>Phyllanthus emblica</i> L.	Phyllanthaceae	Nellika
35	<i>Piper barberi</i> Gamble.	Piperaceae	Kattukurumulak
36	<i>Piper mullesua</i> Buch.-Ham. ex D. Don	Piperaceae	Kattukurumulak
37	<i>Piper nigrum</i> L.	Piperaceae	Kurumulak
38	<i>Glycosmis pentaphylla</i> (Retz.) DC.	Rutaceae	Panal / Pana
39	<i>Flacourtia jangomas</i> (Lour.) Raeusch	Salicaceae	Charalpazham
40	<i>Flacourtia montana</i> J. Graham	Salicaceae	Chaliru
41	<i>Schleichera oleosa</i> (Lour.) Oken	Sapindaceae	Kuntalapooaan
42	<i>Chrysophyllum roxburghii</i> G. Don	Sapotaceae	Noolanga
43	<i>Madhuca neriifolia</i> (Moon) H. J. Lam	Sapotaceae	Attillippa
44	<i>Mimusops elengi</i> L.	Sapotaceae	Ilaanchi, Ilanchi
45	<i>Palaquium ellipticum</i> (Dalzell) Baill.	Sapotaceae	Paali

46	<i>Solanum americanum</i> Mill.	Solanaceae	Chikkuttiadaaku / Kaataankutiadaaku / Kakayadaaku
47	<i>Solanum nigrum</i> L.	Solanaceae	Chikkuttiadaaku / Kaataankutiadaaku / Kakayadaaku
48	<i>Sterculia foetida</i> L.	Sterculiaceae	Vellathondi
49	<i>Grewia tiliifolia</i> Vahl	Tiliaceae	Chadachi / Unnam
50	<i>Lantana camara</i> L.	Verbenaceae	Aripoo
51	<i>Elettaria cardamomum</i> (L.) Maton	Zingiberaceae	Elam

Table 3.5 Rhizomes used by *Kadar*.

Sl. No	Name of the plant	Family	Terminology of <i>Kadar</i>
1	<i>Amorphophallus commutatus</i> (Schott) Engl.	Araceae	Kattuchena, Kattuchenayadaaku
2	<i>Amorphophallus paeoniifolius</i> (Dennst.)	Araceae	Kattuchena, Kattuchenayadaaku
3	<i>Anaphyllum wightii</i> Schott	Araceae	Keerichena
4	<i>Colocasia esculenta</i> (L.) Schott in Schott.	Araceae	Chembaadaak / Chembukilangu
5	<i>Curcuma aromatica</i> Salisb.	Zingiberaceae	Manjakoova
6	<i>Curcuma longa</i> L.	Zingiberaceae	Manjal
7	<i>Zingiber officinale</i> Rose.	Zingiberaceae	Inji

Table 3.6 Tubers used by *Kadar*.

Sl. No	Name of the plant	Family	Terminology of <i>Kadar</i>
1	<i>Beta vulgaris</i> L.	Amaranthaceae	Chorathettam

2	<i>Decalepis hamiltonii</i> Wight & Arn.	Apocynaceae	Magaalikizhangu
3	<i>Asparagus racemosus</i> Willd.	Asparagaceae	Vilpirithi
4	<i>Dioscorea alata</i> L.	Dioscoreaceae	Nerathettam
5	<i>Dioscorea bulbifera</i> L.	Dioscoreaceae	Karrikki, Chavalu
6	<i>Dioscorea hispida</i> Dennst.	Dioscoreaceae	Thalithettam, Vennithettam
7	<i>Dioscorea intermedia</i> Thw.	Dioscoreaceae	Chekavan
8	<i>Dioscorea oppositifolia</i> L.	Dioscoreaceae	Irathettam, Kanalu
9	<i>Dioscorea pentaphylla</i> L.	Dioscoreaceae	Choriyanthettam / Noottathettam
10	<i>Dioscorea spicata</i> B. Heyne ex Roth	Dioscoreaceae	Vettilathettam / Vettilakodithettam
11	<i>Dioscorea tomentosa</i> J. Koenig ex Spreng.	Dioscoreaceae	Shjeluthettam
12	<i>Dioscorea wallichii</i> Hook. f	Dioscoreaceae	Ayanam / Chandanathettam / Mayavalli

Table 3.7 Tender shoot as vegetable used by *Kadar*.

Sl. No	Name of the plant	Family	Terminology of <i>Kadar</i>
1	<i>Arenga wightii</i> Griff.	Arecaceae	Pana
2	<i>Phoenix loureiroi</i> Kunth var. <i>humilis</i> (Royle ex Becc.) Barrow	Arecaceae	Cheevan
3	<i>Pinanga dicksonii</i> (Roxb.) Blume	Arecaceae	Kaattupaakkumaram
4	<i>Bambusa bambos</i> (L.) Voss	Poaceae	Mula
5	<i>Dendrocalamus strictus</i> (Roxb.) Nees	Poaceae	Mula
6	<i>Pseudoxytenanthera bourdillonii</i> (Gamble) H. B. Naithani	Poaceae	Arayambu



Table 3.8 Seeds used by *Kadar*.

Sl. No	Name of the plant	Family	Terminology of <i>Kadar</i>
1	<i>Mangifera indica</i> L.,	Anacardiaceae	Aadaavi manga/ Mangamaram / Kattumoochi
2	<i>Eleusine coracana</i> (L.) Gaertn.	Cyperaceae	Kora
3	<i>Cullenia exarillata</i> A. Robyns	Malvaceae	Karaani
4	<i>Artocarpus heterophyllus</i> Lam.	Moraceae	Chakkamaram/ plaavu
5	<i>Artocarpus hirsutus</i> Lam.	Moraceae	Ayanni
6	<i>Bambusa bambos</i> (L.) Voss	Poaceae	Mula
7	<i>Dendrocalamus strictus</i> (Roxb.) Nees	Poaceae	Mula
8	<i>Pseudoxytenanthera bourdillonii</i> (Gamble) H. B. Naithani	Poaceae	Arayambu
9	<i>Setaria italica</i> (L.) P. Beauv.	Poaceae	Thina
10	<i>Sorghum bicolor</i> (L.) Moench	Poaceae	Poricholam
11	<i>Zea mays</i> L.	Poaceae	Makkacholam
12	<i>Firmiana colorata</i> (Roxb.) R. Br.	Sterculiaceae	Kadaala/ Malamparathi
13	<i>Elettaria cardamomum</i> (L.) Maton	Zingiberaceae	Elam
14	<i>Cycas circinalis</i> L.	Cycadaceae	Eenthadaaku

Table 3.9 Livelihood plants of *Kadar*.

Sl. No	Name of the plant	Family	Terminology of <i>Kadar</i>
1	<i>Ancistrocladus heyneanus</i> Wall.	Ancistrocladaceae	Choolanchappu
2	<i>Miliusa tomentosa</i> (Roxb.) J. Sinclair	Annonaceae	Nedunaru
3	<i>Monoon coffeoides</i> (Thwaites ex Hook.f. & Thomson) B.Xue &	Annonaceae	Nedunaru

	R.M.K.Saunders		
4	<i>Monoon fragrans</i> (Dalzell) B. Xue & R. M. K. Saunders	Annonaceae	Nedunaru
67	<i>Wrightia tinctoria</i> (Roxb.) R. Br.	Apocynaceae	Dhandhapaala, Thondapaala, Nelampaala
5	<i>Calamus thwaitesii</i> Becc.	Arecaceae	Ponthichooral
6	<i>Caryota urens</i> L.	Arecaceae	Pana
7	<i>Canarium strictum</i> Roxb.	Burseraceae	Kannaadithelli, Thelli, Thellipayin
8	<i>Trema orientale</i> (L.) Blume	Cannabaceae	Amai thali naaru
9	<i>Luffa acutangula</i> (L.) Roxb.	Cucurbitaceae	Peaikinkayi, Peekinkayi
10	<i>Cucumis melo</i> L.	Cucurbitaceae	Peekinkayi
11	<i>Dillenia pentagyna</i> Roxb.	Dilleniaceae	Punna/ Vazhapunna
12	<i>Diospyros cordifolia</i> Roxb.	Ebenaceae	Vakkanamaram
13	<i>Senegalia rugata</i> (Lam.) Britton & Rose	Fabaceae	Pulinchika, Pulichi
14	<i>Senegalia torta</i> (Roxb.) Maslin, Seigler & Ebinger	Fabaceae	Choppaneenga
15	<i>Bauhinia racemosa</i> Lam.	Fabaceae	Aarampuli
16	<i>Crotalaria pallida</i> Aiton	Fabaceae	Killuki
17	<i>Prioria pinnata</i> (Roxb. ex DC.) Breteler	Fabaceae	Ennapine
18	<i>Pterocarpus marsupium</i> Roxb.	Fabaceae	Venga/ Benga / Vengachora/ Vengapala
19	<i>Strychnos nux-vomica</i> L.	Loganiaceae	kanjiram
20	<i>Helicteres isora</i> L.	Malvaceae	Chenari, Kaivan
21	<i>Azadirachta indica</i> A. Juss.	Meliaceae	Veppu

22	<i>Anamirta cocculus</i> (L.) Wight & Arn.	Menispermaceae	Pollakaya
23	<i>Cyclea peltata</i> Hook. f. & Thoms.	Menispermaceae	Paadaveru/ Padakiyangu
24	<i>Ficus exasperata</i> Vahl	Moraceae	Paaruvaan
25	<i>Ficus racemosa</i> L.	Moraceae	Athi / Maraavu
26	<i>Ficus tinctoria</i> subsp. <i>gibbosa</i> (Blume) Corner	Moraceae	Vilmaraavu
27	<i>Bambusa bambos</i> (L.) Voss	Poaceae	Mula
28	<i>Dendrocalamus strictus</i> (Roxb.) Nees	Poaceae	Mula
29	<i>Eleusine coracana</i> (L.) Gaertn.	Poaceae	Kora
30	<i>Ochlandra scriptoria</i> (Dennst.) C. E. C. Fisch.	Poaceae	Veyi
31	<i>Ochlandra setigera</i> Gamble	Poaceae	Velleetta
32	<i>Ochlandra travancorica</i> (Bedd.) Benth	Poaceae	Kaareetta
33	<i>Pseudoxytenanthera bourdillonii</i> (Gamble) H. B. Naithani	Poaceae	Arayambu
34	<i>Schizostachyum beddomei</i> (C. E. C. Fisch.) R. B. Majumdar	Poaceae	Noonjooru
35	<i>Canthium rheedei</i> DC.	Rubiaceae	Karakkay
36	<i>Sapindustrifoliatum</i> L.	Sapindaceae	Ullurinji, Urunchikaya, Poochakotta
37	<i>Schleichera oleosa</i> (Lour.) Oken	Sapindaceae	Kuntilapoovaan
38	<i>Ailanthus triphysa</i> (Dennst.) Alston	Simaroubaceae	Mattipal
39	<i>Solanum virginianum</i> L.	Solanaceae	Pechunda
40	<i>Sterculia villosa</i> Roxb.	Sterculiaceae	Aananaaru, vakkanaaru
41	<i>Tetrameles nudiflora</i> R. Br.	Tetramelaceae	Cheeni

42	<i>Grewia tiliifolia</i> Vahl	Tiliaceae	Chadachi / Unnam
43	<i>Debregeasia longifolia</i> (Burm.f.) Wedd.	Urticaceae	Kanavanchi
44	<i>Oreocnide integrifolia</i> (Gaud.) Miq.	Urticaceae	Kanavanchi
45	<i>Cycas circinalis</i> L.	Cycadaceae	Eenthadaaku

Table 3.10 Minor Forest Produce (MFP) plants of *Kadar*.

Sl. No	Name of the plant	Family	Terminology of <i>Kadar</i>
1	<i>Hydnocarpus alpina</i> Wight	Achariaceae	Vetti
2	<i>Hydnocarpus pentandrus</i> (Buch.-Ham.) Oken	Achariaceae	Vetti
3	<i>Decalepis hamiltonii</i> Wight & Arn.	Apocynaceae	Magaalikizhangu
4	<i>Arisaema tortuosum</i> (Wall.) Schott	Araceae	Naagaanthi, Naagaraanthi
5	<i>Arisaema tortuosum tortuosum</i>	Araceae	Naagaanthi, Naagaraanthi
6	<i>Canarium strictum</i> Roxb.	Burseraceae	Kannaadithelli, Thelli, Thellipayin
7	<i>Garcinia gummi-gutta</i> (L.)	Clusiaceae	Puliyotta
8	<i>Terminalia bellirica</i> (Gaertn.) Roxb.	Combretaceae	Thanni
9	<i>Terminalia chebula</i> Retz.	Combretaceae	Kadukka
10	<i>Vateria indica</i> L.	Dipterocarpaceae	Vellapayin/Undapayin
11	<i>Elaeocarpus tuberculatus</i> Roxb.	Elaeocarpaceae	Pauhmb
12	<i>Acacia sinuata</i> (Lour.) Merr.	Fabaceae	Pulinchika, Pulichi

13	<i>Pueraria tuberosa</i> (Willd.) DC.	Fabaceae	Paalmuthukku
14	<i>Cinnamomum bejolghota</i> (Buch.-Ham.) Sweet	Lauraceae	Lavangapatta
15	<i>Phyllanthus emblica</i> L.	Phyllanthaceae	Nellika
16	<i>Piper barberi</i> Gamble.	Piperaceae	Kattukurumulak
17	<i>Piper longum</i> L.	Piperaceae	Thuppali/Thuppili/Thippili
18	<i>Piper mullesua</i> Buch.-Ham. ex D. Don	Piperaceae	Kattukurumulak
19	<i>Piper nigrum</i> L.	Piperaceae	Kurumulak
20	<i>Cymbopogon citratus</i> (DC.) Stapf	Poaceae	Thailappullu
21	<i>Curcuma caesia</i> Roxb.	Zingiberaceae	Karimkoova

Table 3.11 Plants related to the belief and worship of *Kadar*.

Sl. No	Name of the plant	Family	Terminology of <i>Kadar</i>
1	<i>Alstonia scholaris</i> (L.) R. Br.	Apocynaceae	Ezhilumpalam/ Paala
2	<i>Aristolochia indica</i> L.	Arisstolochiaceae	Pavattathettam
3	<i>Aloe vera</i> (L.) Burm. f.	Liliaceae	Kattarvazha
4	<i>Azadirachta indica</i> A. Juss.	Meliaceae	Veppu
5	<i>Coscinium fenestratum</i> (Gaertn.) Colebr.	Menispermaceae	Maramanjalkodi
6	<i>Ficus benghalensis</i> L.	Moraceae	Kallichchi
7	<i>Ficus racemosa</i> L.	Moraceae	Athi / Maraavu
8	<i>Ficus religiosa</i> L.	Moraceae	Maraavu



9	<i>Pittosporum neelgherrense</i> Wight & Arn.	Pittosporaceae	Analivenga
10	<i>Bambusa bambos</i> (L.) Voss	Poaceae	Mula
11	<i>Dendrocalamus strictus</i> (Roxb.) Nees	Poaceae	Mula

Table 3.12 Plants related to the custom of *Kadar*.

Sl. No	Name of the plant	Family	Terminology of <i>Kadar</i>
1	<i>Mangifera indica</i> L.	Anacardiaceae	Aadaavi manga/ Mangamaram / Kattumoochi
2	<i>Calotropis gigantea</i> (L.) Dryand.	Apocynaceae	Erukkila
3	<i>Canarium strictum</i> Roxb.	Burseraceae	Kannaadithelli, Thelli, Thellipayin
4	<i>Vateria indica</i> L.	Dipterocarpaceae	Vellapayin/Undapayin
5	<i>Azadirachta indica</i> A. Juss.	Meliaceae	Veppu
6	<i>Curcuma longa</i> L.	Zingiberaceae	Manjal
7	<i>Cycas circinalis</i> L.	Cycadaceae	Eenthadaaku

Table 3.13 Plants related to the beverages of *Kadar*.

Sl. No	Name of the plant	Family	Terminology of <i>Kadar</i>
1	<i>Hemidesmus indicus</i> (L.) R. Br.	Apocynaceae	Nannaniveru
2	<i>Arenga wightii</i> Griff.	Arecaceae	Pana
3	<i>Ehretia aquatica</i> (Lour.) Gottschling & Hilger	Boraginaceae	Kallurvachi, Vettilavanchi

4	<i>Terminalia chebula</i> Retz.	Combretaceae	Kadukka
5	<i>Syzygium cumini</i> (L.) Skeels.	Myrtaceae	Nara
6	<i>Flacourtia jangomas</i> (Lour.) Raeusch	Salicaceae	Charalpazham
7	<i>Flacourtia montana</i> J. Graham	Salicaceae	Chaliru

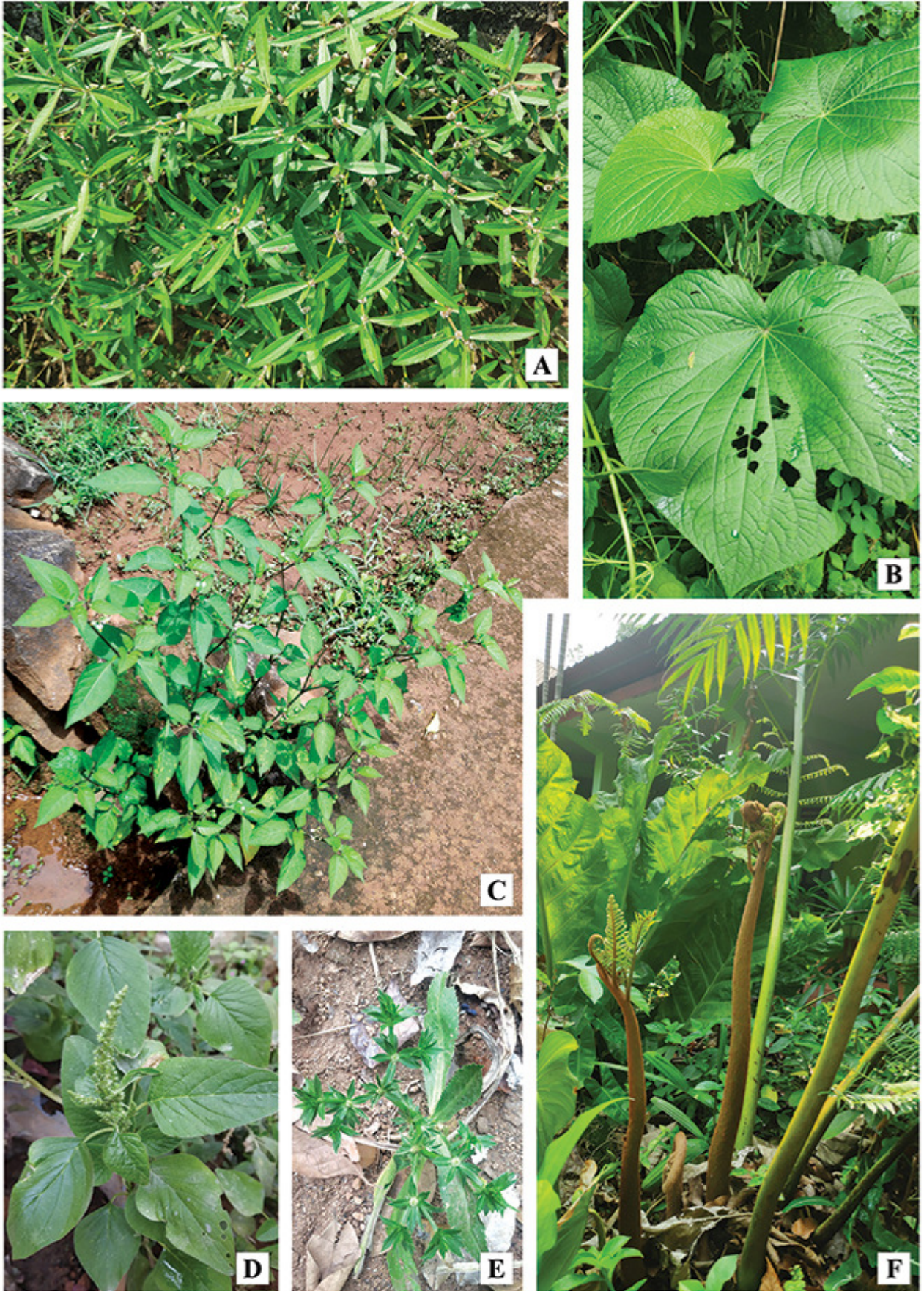
Table 3.14 Plants for masticator by the *Kadar* people.

Sl. No	Name of the plant	Family	Terminology of <i>Kadar</i>
1	<i>Areca catechu</i> L.	Arecaceae	Paakkmaram
2	<i>Ehretia aquatica</i> (Lour.) Gottschling & Hilger	Boraginaceae	Kallurvachi, Vettilavanchi
3	<i>Lobelia nicotianifolia</i> Roth	Campanulaceae	Kattupukayila
4	<i>Artocarpus gomezianus</i> <i>zeylanicus</i> Jarrett	Moraceae	Paakmaram
5	<i>Piper betle</i> L.	Piperaceae	Vettila
6	<i>Nicotiana tabacum</i> L.	Solanaceae	Pokala

### 3.3.2.2 Ethnic knowledge related with livelihood and culture of *Malasar*

The *Malasar* ethnic community use 59 edible fruits, 36 leafy vegetables, 12 seeds, 14 tubers, eight edible mushroom, six tender shoots, four rhizomes, two beverages and three masticators. Here, the edible fruits constitute 42% in which the most commonly used are *Mangifera indica*, *Borassus flabellifer*, *Syzygium cumini*, *Psidium guajava*, *Madhuca longifolia*, *Ziziphus rugosa*, *Bridelia retusa*, *Baccaurea courtallensis*, etc.





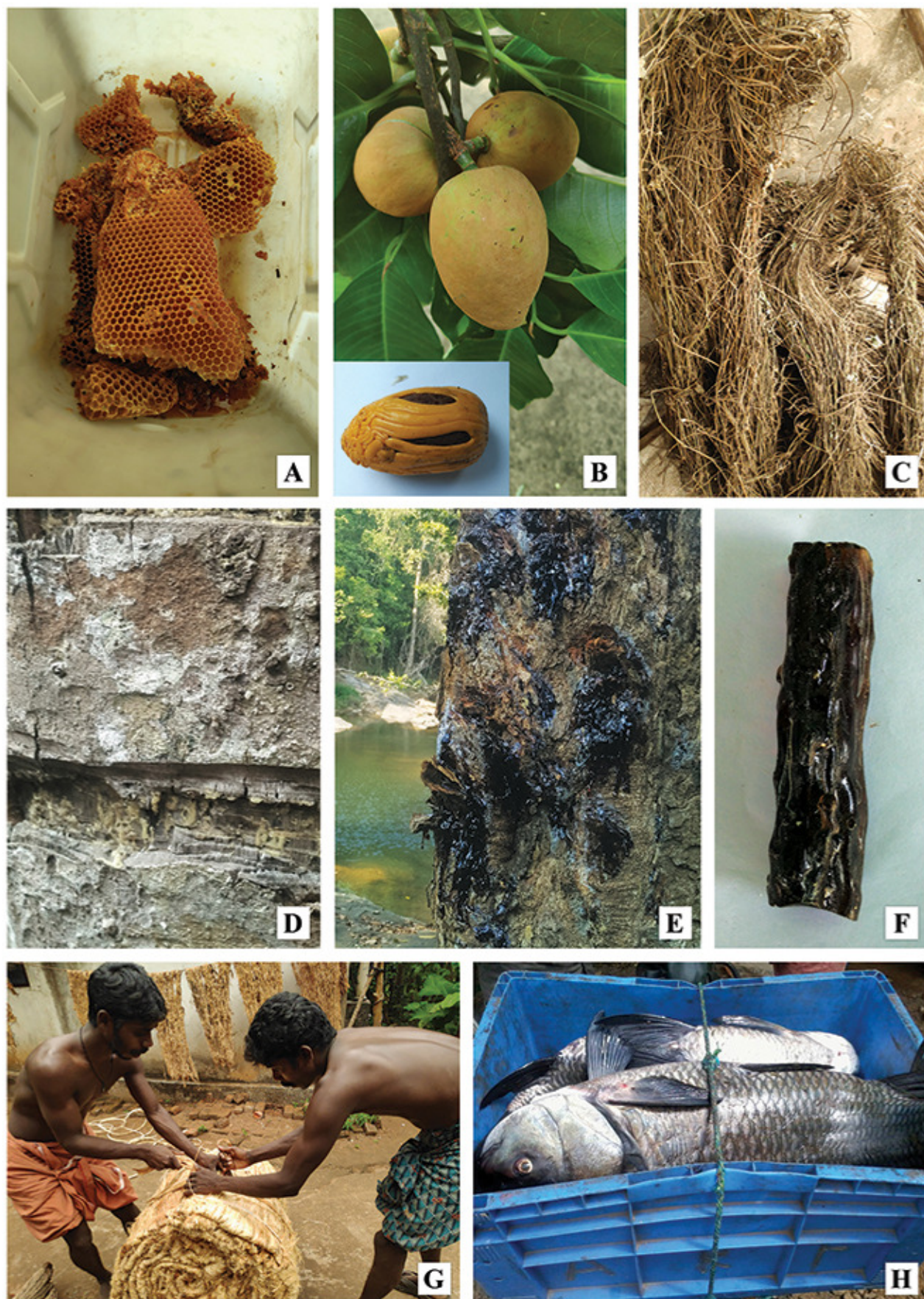
**Fig. 3.10** Leafy vegetables of Kadar : A. 'Ponnankanniyadaaku' (*Alternanthera sessilis*), B. 'Thiriyadaaku' (*Piper umbellatum*), C. 'Chikkuttiadaaku' / 'Kaattaankutiyadaaku' / 'Kakayadaaku' (*Solanum americanum*), D. 'Pattiyadaak' (*Amaranthus viridis*), E. 'Aanamalli' (*Eryngium foetidum*), F. 'Kidangadaaku' (*Angiopteris* sp.).





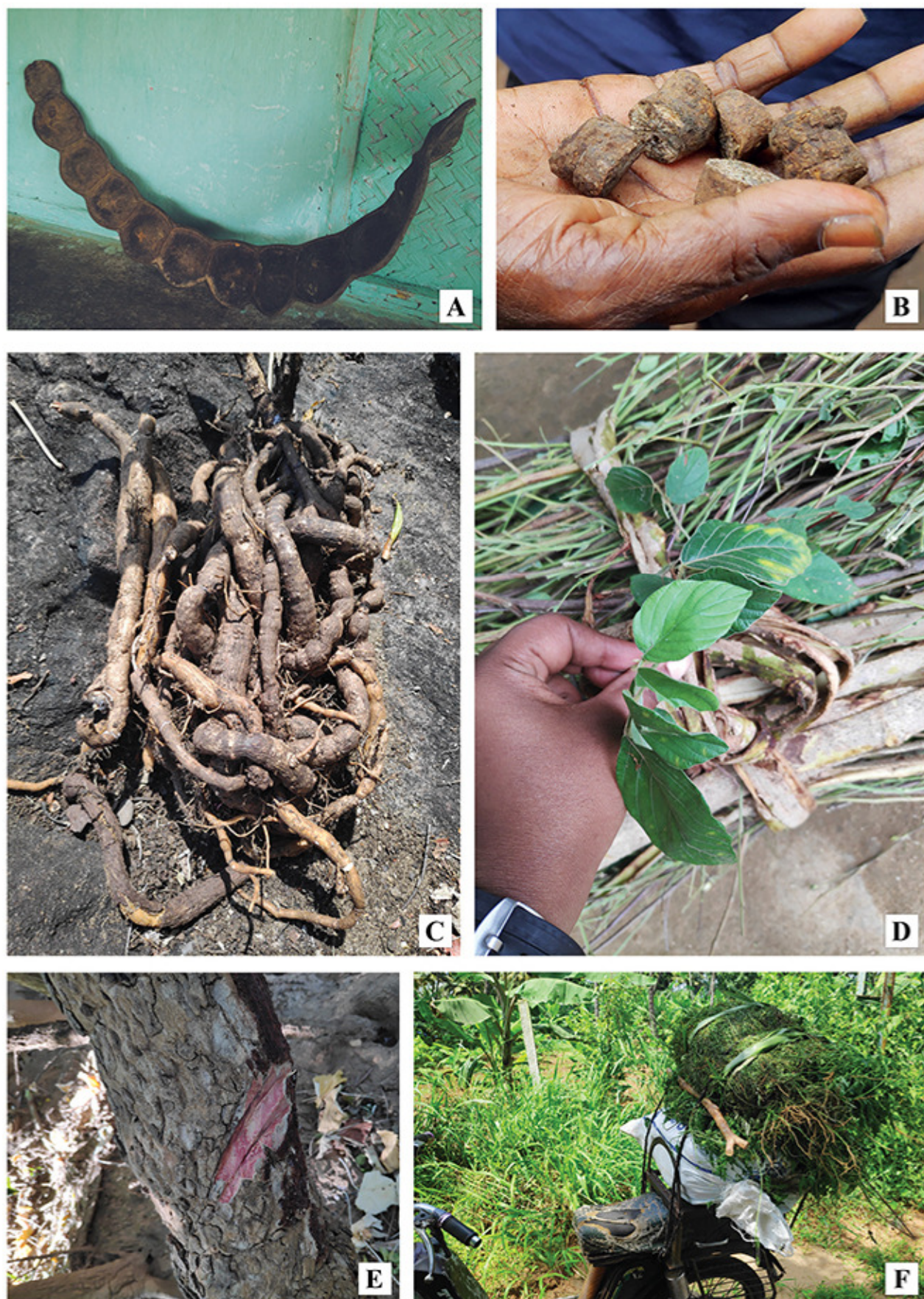
**Fig. 3.11** Leafy vegetables of *Malasar* : A. 'Kolthakara' (*Senna occidentalis*), B. 'Chakkarathakara', 'Sattithakarai' (*Senna tora*), C. 'Thamizhama' / 'Komanamberilakri' (*Boerhavia diffusa*), D. 'Pannalakri' (*Celosia argentea*), E. 'Masthishkalakri' (*Centella asiatica*), F. 'Vasalalakri' (*Basella alba*).





**Fig. 3.12 Ethnoeconomical knowledge of Kadar :** A. Wild honey comb collected in a jar, B. Fruits of *Myristica malabarica*, C. Dried *Piper longum* (whole plant), D. Bark cut, oozing resin of White dammer (*Vateria indica*), E. Bark cut, oozing resin of Black dammer (*Canarium strictum*), F. Resin of Black dammer, G. Kadar people tagging the role of dried bark of *Senegalia caesia*, H. A crate of fish caught for selling.





**Fig. 3.13** Ethnoeconomical knowledge of Malasar : A. Fruit of *Entada rheedii*, B. Dried tuber of *Hemidesmus indicus*, C. Tuber of *Decalepis hamiltonii*, D. Bundle of *Pleurolobus gangeticus* collected for selling to the Ayurveda medicine agencies, E. Bark cut, *Salacia reticulata*, F. Bundle of *Cardiospermum halicacabum* collected for selling to the Ayurveda medicine agencies.



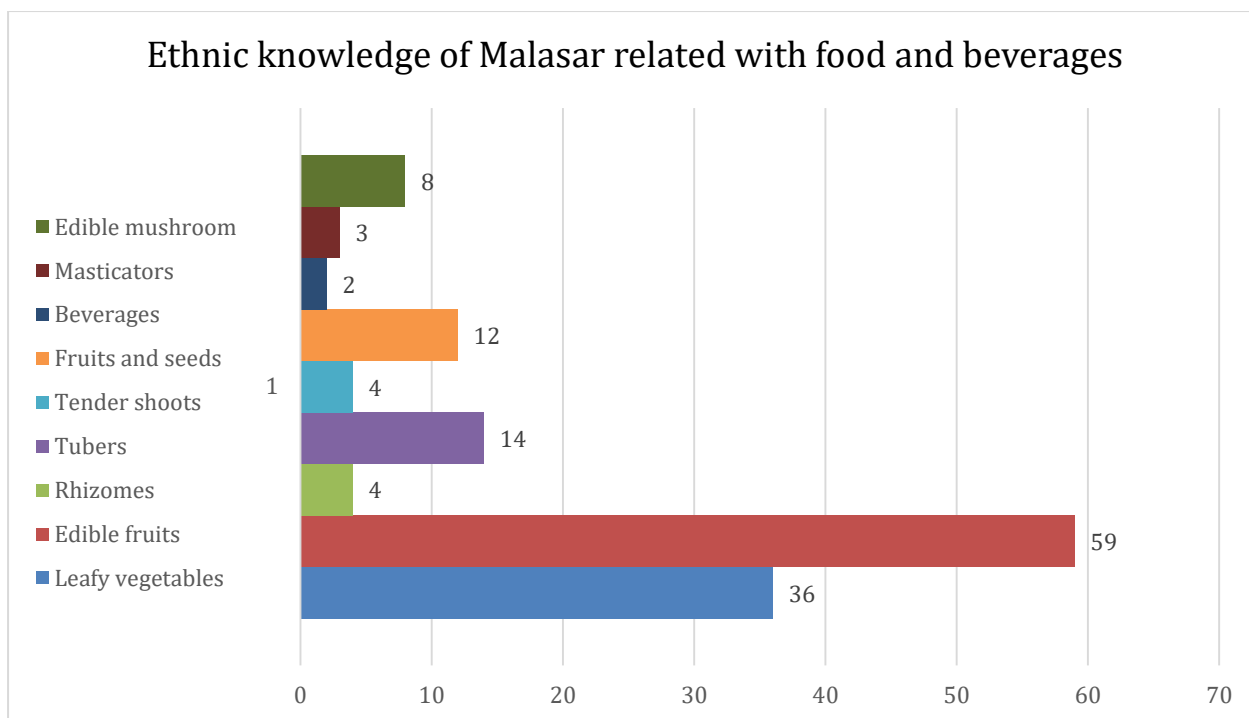


Fig. 3.14 Ethnic knowledge of *Malasar* related with food and beverages.

The plant species such as *Trianthema portulacastrum*, *Amaranthus caudatus*, *Celosia argentea*, *Amorphophallus paeoniifolius*, *Coccinia grandis*, *Boerhavia diffusa*, *Persicaria chinensis* were the major leafy vegetables used by the *Malasar* ethnic community. The leafy vegetables constitute 25% followed by 10% seeds, 8% tubers, 6% edible mushroom, 3% tender shoots, 3% rhizomes, 2% masticators and 1% beverages. Seeds of *Entada rheedii*, *Xylia xylocarpa*, *Artocarpus hirsutus*, *Bambusa bambos*, *Zea mays* were included in their diet. Tubers such as *Decalepis hamiltoni*, *Ipomoea batatas*, *Manihot esculenta*, *Dioscorea wallichii* and edible mushroom like *Pleurotus ostreatus*, *Termitomyces clypeatus*, *Auricularia auricula-judae*, *Lycoperdon perlatum* were used as food. The tender shoots of *Arenga wightii*, *Bambusa bambos*, *Cycas circinalis*, *Pinanga dicksoni* and rhizomes of *Amorphophallus paeoniifolius*, *Colocasia esculenta*, *Curcuma zedoaria*, *Zingiber officinale* were also used as food. The masticators used by *Malasar* includes *Areca catechu*, *Piper betle* and *Nicotiana tabacum*. *Ehretia aquatica* and *Pterocarpus marsupium* are the plants used for traditional beverages used by the *Malasar* ethnic community.

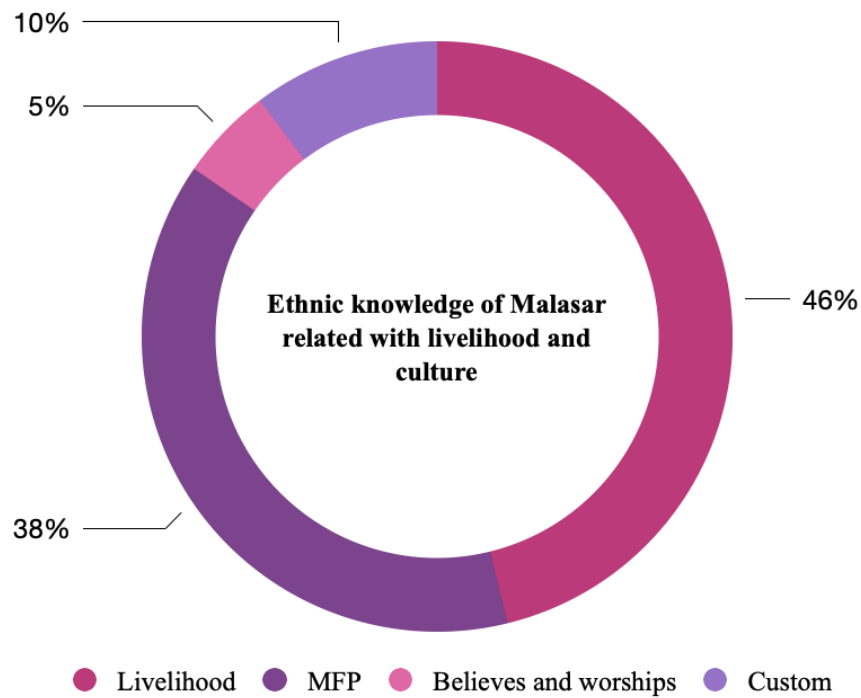


Fig. 3.15 Ethnic knowledge of *Malasar* related with livelihood and culture.

The study brought out 15 important MFPs contributing to the economy of the *Malsar* community and 18 plant species for their other livelihood. Some of the plants like *Cucumis melo*, *Erythrina variegata*, *Artocarpus heterophyllus*, *Bauhinia racemose* were commonly used to meet their livelihood. The MFPs such as *Piper longum*, *Piper nigrum*, *Tinospora cordifolia*, *Terminalia bellirica* and medicinal plants contribute major share to their economy. *Alstonia scholaris* and *Ficus religiosa* are the plants considered as a part of beliefs and worship by them. Customarily they provide special values for the species like *Mangifera indica*, *Pterocarpus marsupium*, *Azadirachta indica* and *Cycas circinalis*.

Table 3.15 Leafy vegetables used by *Malasar*.

Sl. No.	Name of the Plant	Family	Terminology of <i>Malasar</i>
1	<i>Trianthema portulacastrum</i> L.	Aizoaceae	Seranalakri
2	<i>Alternanthera sessilis</i> (L.) R. Br. ex DC.	Amaranthaceae	Ponnamkannikkeera / Meenamkannikkeera
3	<i>Amaranthus caudatus</i> L.	Amaranthaceae	Thandanlakri
4	<i>Amaranthus hybridus</i> L.	Amaranthaceae	Thandanlakri
5	<i>Amaranthus spinosus</i> L.	Amaranthaceae	Mullukeerai / Mullulakri
6	<i>Amaranthus viridis</i> L.	Amaranthaceae	Kuppakeerai / Kuppalakri
7	<i>Celosia argentea</i> L.	Amaranthaceae	Pannalakri
8	<i>Centella asiatica</i> (L.) Urb.	Apiaceae	Vallaralakri / Masthishkalakri
9	<i>Holostemma ada-kodien</i> Schult.	Apocynaceae	Anjampaalalakri
10	<i>Amorphophallus paeoniifolius</i> (Dennst.)	Araceae	Kattuchena
11	<i>Colocasia esculenta</i> (L.) Schott in Schott.	Araceae	Chembukilangu / Chembu / Sembulakri
12	<i>Basella alba</i> L.	Basellaceae	Vasalalakri
13	<i>Lobelia heyneana</i> Schult.	Campanulaceae	Maankeera / Maanlakri
14	<i>Ipomoea aquatica</i> Forssk.	Convolvulaceae	Vellalakri
15	<i>Coccinia grandis</i> (L.) Voigt	Cucurbitaceae	Kovalakri
16	<i>Cucumis prophetarum</i> L.	Cucurbitaceae	Chithrankai
17	<i>Cucumis sativus</i> L.	Cucurbitaceae	Vellari
18	<i>Cucurbita maxima</i> Duchesne	Cucurbitaceae	Arasankani
19	<i>Diplocyclos palmatus</i> (L.) C. Jeffrey	Cucurbitaceae	Ivirallakri

20	<i>Cucumis melo</i> L.	Cucurbitaceae	Peekinkayi
21	<i>Momordica dioica</i> Roxb. ex Willd.	Cucurbitaceae	Paavalailakri
22	<i>Senna occidentalis</i> (L.) Link	Fabaceae	Kolthakara
23	<i>Senna tora</i> (L.) Roxb.	Fabaceae	Sattithakarai / Chakkarathakara
24	<i>Sesbania grandiflora</i> (L.) Poir.	Fabaceae	Agathilakri
25	<i>Vigna unguiculata</i> (L.) Walp.	Fabaceae	Thanangani
26	<i>Marsilea minuta</i> L.	Marsileaceae	Aralakri
27	<i>Moringa oleifera</i> Lam.	Moringaceae	Muringai
28	<i>Boerhavia diffusa</i> L.	Nyctaginaceae	Thamizhama / Komanamberilakri
29	<i>Oxalis corniculata</i> L.	Oxalidaceae	Pulilakri
30	<i>Adenia hondala</i> (Gaertn.) W. J. de Wilde	Passifloraceae	Kannanchirattalakri
31	<i>Breynia quadrangularis</i> (Willd.) Chakrab. & N. P. Balakr.	Phyllanthaceae	Kurumurangai
32	<i>Persicaria chinensis</i> (L.) H. Gross	Polygonaceae	Odimadavalinalakri
33	<i>Portulaca oleracea</i> L.	Portulacaceae	Thammaikelanthan
34	<i>Solanum americanum</i> Mill.	Solanaceae	Sukkuttikeyera / Sukkutilakri
35	<i>Laportea interrupta</i> (L.) Chew.	Urticaceae	Thuvalakri
36	<i>Diplazium esculentum</i> (Retz.) Sw.	Athyriaceae	Surulilakri

Table 3.16 Edible fruits of *Malasar*.

Sl. No.	Name of the Plant	Family	Terminology of <i>Malasar</i>
1	<i>Mangifera indica</i> L.	Anacardiaceae	Kattumanga
2	<i>Semecarpus anacardium</i> L. f.	Anacardiaceae	Cherupalam



3	<i>Spondias pinnata</i> (L.f.)Kurz.	Anacardiaceae	Ambazham
4	<i>Milium tomentosum</i> (Roxb.) Finet & Gagnep.	Annonaceae	Kaanakapazham
5	<i>Monoon coffeoides</i> (Thwaites ex Hook.f. & Thomson) B.Xue & R.M.K.Saunders	Annonaceae	Nedunaru
6	<i>Monoon fragrans</i> (Dalzell) B.Xue & R.M.K.Saunders	Annonaceae	Nedunaru
7	<i>Colocasia esculenta</i> (L.) Schott in Schott.	Araceae	Chembukilangu / Chembu / Sembulakri
8	<i>Borassus flabellifer</i> L.	Arecaceae	Karimbana
9	<i>Calamus hookerianus</i> Becc.	Arecaceae	Vallichoorapalam
10	<i>Calamus thwaitesii</i> Becc.	Arecaceae	Ponthichoorapalam
11	<i>Cocos nucifera</i> L.	Arecaceae	Thengu
12	<i>Phoenix loureiroi</i> Kunth	Arecaceae	Cheevan
13	<i>Cordia dichotoma</i> G.Forst.	Boraginaceae	Thumbapalam
14	<i>Cordia wallichii</i> G.Don	Boraginaceae	Viri
15	<i>Opuntia dillenii</i> (Ker Gawl.) Haw.	Cactaceae	Mullukallipalam
16	<i>Cereus pterogonus</i>	Cactaceae	Kathalikilangu
17	<i>Mesua ferrea</i> L.	Calophyllaceae	Naangu
18	<i>Carica papaya</i> L.	Caricaceae	Pappali
19	<i>Garcinia gummi-gutta</i> (L.) Roxb.	Clusiaceae	Kodampuli
20	<i>Argyreia hirsuta</i> Wight & Arn.	Convolvulaceae	Onkattapazham
21	<i>Argyreia nervosa</i> (Burm.f.) Bojer	Convolvulaceae	Onkattapazham
22	<i>Coccinia grandis</i> (L.) Voigt	Cucurbitaceae	Kovalakri
23	<i>Cucumis sativus</i> L.	Cucurbitaceae	Vellari
24	<i>Cucurbita maxima</i> Duchesne	Cucurbitaceae	Arasankani
25	<i>Momordica dioica</i> Roxb. ex Willd.	Cucurbitaceae	Paavalailakri

26	<i>Bauhinia racemosa</i> Lam.	Fabaceae	Kudakampuli
27	<i>Dolichos trilobus</i> L.	Fabaceae	Kaattavarai
28	<i>Pithecellobium dulce</i> (Roxb.) Benth.	Fabaceae	Pulipalam
29	<i>Tamarindus indica</i> L.	Fabaceae	Pulinjikuru
30	<i>Artocarpus heterophyllus</i> Lam.	Moraceae	Sakkaipalam
31	<i>Artocarpus hirsutus</i> Lam.	Moraceae	Ayannisakkaipalam
32	<i>Ficus racemosa</i> L.	Moraceae	Athi
33	<i>Ensete superbum</i> (Roxb.) Cheesman	Musaceae	Kalluvazha
34	<i>Psidium guajava</i> L.	Myrtaceae	KoyyaKaayi
35	<i>Syzygium cumini</i> (L.) Skeels.	Myrtaceae	Njava
36	<i>Syzygium densiflorum</i> Wall. ex Wt. & Arn.	Myrtaceae	Cherunjava
37	<i>Antidesma acidum</i> Retz.	Phyllanthaceae	Kambilipulipalam
38	<i>Baccaurea courtallensis</i> (Wight) Müll. Arg.	Phyllanthaceae	Mootilpazham
39	<i>Bridelia retusa</i> (L.) A. Juss.	Phyllanthaceae	Mulluvenga
40	<i>Phyllanthus emblica</i> L.	Phyllanthaceae	Nellika
41	<i>Ziziphus mauritiana</i> Lam.	Rhamnaceae	Peumsooripalam
42	<i>Ziziphus oenoplia</i> (L.) Miller	Rhamnaceae	Sooripalam / Chodalimullu
43	<i>Ziziphus rugosa</i> Lam.	Rhamnaceae	Kottalaipalam
44	<i>Rubus glomeratus</i> Blume	Rosaceae	Mullurojapalam
45	<i>Tamilnadia uliginosa</i> (Retz.) Tirveng. & Sastre	Rubiacea	Kalikarai
46	<i>Glycosmis pentaphylla</i> (Retz.) DC.	Rutaceae	Pana
47	<i>Flacourtia montana</i> J. Graham	Salicaceae	Chalirupalam
48	<i>Scolopia crenata</i> (Wight & Arn.) Clos	Salicaceae	Chithalipalam

49	<i>Madhuca longifolia</i> (J. Koenig ex L.) J. F. Macbr.	Sapotaceae	Pala palam
50	<i>Mimusops elengi</i> L.	Sapotaceae	Ilanchi
51	<i>Palaquium ellipticum</i> (Dalzell) Baill.	Sapotaceae	Paali
52	<i>Capsicum frutescens</i> L.	Solanaceae	Kanthari
53	<i>Physalis angulata</i> L.	Solanaceae	Pottaari
54	<i>Physalis peruviana</i> L.	Solanaceae	Pottaari
55	<i>Solanum americanum</i> Mill.	Solanaceae	Sukkuttikeera / Sukkutilakri
56	<i>Solanum lycopersicum</i> L.	Solanaceae	Thakkali
57	<i>Solanum melongena</i> L.	Solanaceae	Kathiri
58	<i>Solanum torvum</i> Sw.	Solanaceae	Sunda
59	<i>Lantana camara</i> L.	Verbenaceae	Kongini, Aripalam

Table 3.17 Rhizomes of *Malasar*.

Sl. No.	Name of the Plant	Family	Terminology of <i>Malasar</i>
1	<i>Amorphophallus paeoniifolius</i> (Dennst.)	Araceae	Kattuchena
2	<i>Colocasia esculenta</i> (L.) Schott in Schott.	Araceae	Chembukilangu / Chembu / Sembulakri
3	<i>Curcuma zedoaria</i> (Christm.) Roscoe	Zingiberaceae	Maanginji
4	<i>Zingiber officinale</i> Roscoe	Zingiberaceae	Inji

Table 3.18 Tubers used by *Malasar*.

Sl. No.	Name of the Plant	Family	Terminology of <i>Malasar</i>
1	<i>Decalepis hamiltonii</i> Wight & Arn.	Apocynaceae	Magaalikizhangu / Magaalikilangu
2	<i>Decalepis salicifolia</i> Bedd. ex Venter	Apocynaceae	Magaalikizhangu / Magaalikilangu
3	<i>Asparagus racemosus</i> Willd.	Asparagaceae	shathavalli / Chathavalli
4	<i>Ipomoea batatas</i> (L.) Lam.	Convolvulaceae	Chakkaravallikizhangu
5	<i>Dioscorea alata</i> L.	Dioscoreaceae	Kaavuthshangu
6	<i>Dioscorea bulbifera</i> L.	Dioscoreaceae	Noopashangu
7	<i>Dioscorea hispida</i> Dennst.	Dioscoreaceae	Thalishangu
8	<i>Dioscorea intermedia</i> Thwaites	Dioscoreaceae	Pillamkodi
9	<i>Dioscorea oppositifolia</i> L.	Dioscoreaceae	Kaanakishangu
10	<i>Dioscorea pentaphylla</i> L.	Dioscoreaceae	Naattushangu
11	<i>Dioscorea spicata</i> B. Heyne ex Roth	Dioscoreaceae	Mankodi
12	<i>Dioscorea tomentosa</i> J. Koenig ex Spreng.	Dioscoreaceae	Shjelushangu
13	<i>Dioscorea wallichii</i> Hook. f.	Dioscoreaceae	Naarushangu
14	<i>Manihot esculenta</i> Crantz	Euphorbiaceae	Poolakilangu

Table 3.19 Tender Shoots used by *Malasar*.

Sl. No.	Name of the Plant	Family	Terminology of <i>Malasar</i>
1	<i>Arenga wightii</i> Griff.	Arecaceae	Malanthengu
2	<i>Pinanga dicksonii</i> (Roxb.) Blume	Arecaceae	Kaattupaakkumaram

3	<i>Bambusa bambos</i> (L.) Voss	Poaceae	Mula
4	<i>Cycas circinalis</i> L.	Cycadaceae	Eenthu

Table 3.20 Seeds used by *Malasar*.

Sl. No.	Name of the Plant	Family	Terminology of <i>Malasar</i>
1	<i>Terminalia bellirica</i> (Gaertn.) Roxb.	Combretaceae	Thannimaram
2	<i>Entada rheedei</i> Spreng.	Fabaceae	Thaylakaay
3	<i>Xylia xylocarpa</i> (Roxb.) W. Thoub.	Fabaceae	Irumullu
4	<i>Sterculia foetida</i> L.	Malvaceae	Kaavala
5	<i>Artocarpus heterophyllus</i> Lam.	Moraceae	Sakkaipalam
6	<i>Artocarpus hirsutus</i> Lam.	Moraceae	Ayannisakkaipalam
7	<i>Bambusa bambos</i> (L.) Voss	Poaceae	Mula
8	<i>Eleusine coracana</i> (L.) Gaertn.	Poaceae	Kora
9	<i>Setaria italica</i> (L.) P. Beauv.	Poaceae	Thina
10	<i>Sorghum bicolor</i> (L.) Moench	Poaceae	Poricholam
11	<i>Zea mays</i> L.	Poaceae	Makkacholam
12	<i>Cycas circinalis</i> L.	Cycadaceae	Eenthu

Table 3.21 Livelihood plants of *Malasar*.

Sl. No.	Name of the Plant	Family	Terminology of <i>Malasar</i>
1	<i>Calamus thwaitesii</i> Becc.	Arecaceae	Ponthichoorapalam
2	<i>Caryota urens</i> L.	Arecaceae	Panai
3	<i>Mesua ferrea</i> L.	Calophyllaceae	Naangu
4	<i>Trema orientale</i> (L.) Blume	Cannabaceae	Amai thali



5	<i>Getonia floribunda</i> Roxb.	Combretaceae	Pullaani
6	<i>Camonea umbellata</i> (L.) A. R. Simões & Staples	Convolvulaceae	Vakaravalli
7	<i>Cucumis melo</i> L.	Cucurbitaceae	Peekinkayi
8	<i>Bauhinia racemosa</i> Lam.	Fabaceae	Kudakampuli
9	<i>Erythrina variegata</i> L.	Fabaceae	Mullumurikk/ Muringa
10	<i>Gliricidia sepium</i> (Jacq.) Kunth	Fabaceae	Seemakkonna
11	<i>Senegalia caesia</i> (L.) Maslin, Seigler & Ebinger	Fabaceae	Incha
12	<i>Spatholobus parviflorus</i> (Roxb. Ex G. Don) Kuntze	Fabaceae	Pannimuttaal shangu
13	<i>Strychnos nux-vomica</i> L.	Loganiaceae	kanjiram
14	<i>Artocarpus heterophyllus</i> Lam.	Moraceae	Sakkaipalam
15	<i>Artocarpus hirsutus</i> Lam.	Moraceae	Ayannisakkaipalam
16	<i>Ficus racemosa</i> L.	Moraceae	Athi
17	<i>Bambusa bambos</i> (L.) Voss	Poaceae	Mula
18	<i>Cycas circinalis</i> L.	Cycadaceae	Eenthu

Table 3.22 MFP plants of *Malasar*.

Sl. No.	Name of the Plant	Family	Terminology of <i>Malasar</i>
1	<i>Decalepis hamiltonii</i> Wight & Arn.	Apocynaceae	Magaalikizhangu / Magaalikilangu
2	<i>Decalepis salicifolia</i> Bedd. ex Venter	Apocynaceae	Magaalikizhangu / Magaalikilangu
3	<i>Hemidesmus indicus</i> (L.) R. Br.	Apocynaceae	Nannari

4	<i>Asparagus racemosus</i> Willd.	Asparagaceae	shathavalli / Chathavalli
5	<i>Terminalia bellirica</i> (Gaertn.) Roxb.	Combretaceae	Thannimaram
6	<i>Terminalia chebula</i> Retz.	Combretaceae	Kadukka
7	<i>Pleurolobus gangeticus</i> (L.) J. St.-Hil. ex H. Ohashi & K. Ohashi	Fabaceae	Orela
8	<i>Pseudarthria viscida</i> (L.) Wight & Arn.	Fabaceae	Mukala
9	<i>Tinospora cordifolia</i> (Willd.) Hook. f. & Thomson	Menispermaceae	Chittamruth
10	<i>Benstonea foetida</i> (Roxb.) Callm. & Buerki	Pandanaceae	Kaithauzhi
11	<i>Phyllanthus emblica</i> L.	Phyllanthaceae	Nellika
12	<i>Piper peepuloides</i> Roxb.	Piperaceae	Kattukurumulak
13	<i>Piper longum</i> L.	Piperaceae	Thippali
14	<i>Piper nigrum</i> L.	Piperaceae	Kurumulakai
15	<i>Cardiospermum halicacabum</i> L.	Sapindaceae	Uzhinja / Niravalli

Table 3.23 Plants related to the belief and worship of *Malasar*.

Sl. No.	Name of the Plant	Family	Terminology of <i>Malasar</i>
1	<i>Alstonia scholaris</i> (L.) R. Br.	Apocynaceae	Ezhilumpalam/ Paala
2	<i>Ficus religiosa</i> L.	Moraceae	Arayal

Table 3.24 Custom related plants of *Malasar*.

Sl. No.	Name of the Plant	Family	Terminology of <i>Malasar</i>
1	<i>Mangifera indica</i> L.	Anacardiaceae	Kattumanga

2	<i>Pterocarpus marsupium</i> Roxb.	Fabaceae	Venga
3	<i>Azadirachta indica</i> A. Juss.	Meliaceae	Veppu
4	<i>Cycas circinalis</i> L.	Cycadaceae	Eenthu

Table 3.25 Plants related to the beverages of *Malasar*.

Sl. No.	Name of the Plant	Family	Terminology of <i>Malasar</i>
1	<i>Ehretia aquatica</i> (Lour.) Gottschling & Hilger	Boraginaceae	Kallurvachi
2	<i>Pterocarpus marsupium</i> Roxb.	Fabaceae	Venga

Table 3.26 Plants for masticator by the *Malasar* people.

Sl. No.	Name of the Plant	Family	Terminology of <i>Malasar</i>
1	<i>Areca catechu</i> L.	Arecaceae	Paakkmaram
2	<i>Piper betle</i> L.	Piperaceae	Vettila
3	<i>Nicotiana tabacum</i> L.	Solanaceae	Pokala

Table 3.27 Edible mushrooms of *Malasar*.

Sl. No.	Name of the Plant	Family	Terminology of <i>Malasar</i>
1	<i>Lycoperdon perlatum</i> Pers.	Agaricaceae	Panthrakelan
2	<i>Auricularia auricula-judae</i> (Bull.) J.Schröt.	Auriculariaceae	Kathu kelan
3	<i>Termitomyces clypeatus</i>	Lyophyllaceae	Pitulakegal
4	<i>Termitomyces microcarpus</i> (Berk and Br.) Helim.	Lyophyllaceae	Arikegal

5	<i>Termitomyces eurhizus</i> (Berk) Him.	Lyophyllaceae	Aanamethiyankegal
6	<i>Pleurotus ostreatus</i> (Jacq.) P. Kumm.	Pleurotaceae	Marakkegal
7	<i>Pleurotus</i> sp.	Pleurotaceae	Mungakegal
8	<i>Volvariella volvacea</i> (Bull. Fr.) Singer	Pluteaceae	Vaikkakegal

### 3.3.3 Ethnoecological knowledge related with flora and Fauna by *Kadar*

#### 3.3.3.1 Different kinds of Wild honey, season, and processing method

There are mainly four types of honey collected by *Kadars* from the tropical evergreen forest. (a). '*Vanthen*' (*Apis dorsata dorsata*), (b). '*Kurunnan*' (*Apis cerana indica*), (c). '*Kottaan*' (*Apis florea*) and (d). '*Karinthan*' (*Tetragonula iridepennis*). The nature, availability, odor, quality and quantity of honey is based on the season, floristic diversity, flowering phenology of wild plants, vegetation and rainfall of the region. The honey collection season can be broadly divided into two periods; April – June, and September – November (Roy et al, 1997). The honey collection season for *Kadar* start in March and extents upto June.

##### 3.3.3.1.1 Different kinds of honey

###### (a). '*Vanthen*' (*Apis dorsata*)

'*Vanthen*' is the honey getting from *Apis dorsata* hive, the most important and common in the forest. It is seen in the branches of big trees in the forest and the cliff ('*Varathen*'). The honey hive of '*Vanthen*' is comparatively larger than the others. Honey hive has three layers; '*Pookkatti*' (pollen) in the top close to the branch, '*Theeli*' (honey storing area) in the middle, and '*Ratt*' (eggs laying place) in the bottom of the honey hive. The '*Vanthen*' is collected chiefly for marketing and it contribute major portion of their income.

(b). '*Kurunnan*' (*Apis cerana indica*)

'*Kurunnan*' honeycomb is of the *Apis cerana indica*. The honeycombs are seen in the tree and rock holes. The '*Kurunnan*' make large combs and are similar to '*Vanthen*' in quantity and their market value is same. They usually sell it together.

(c). '*Kottaan*' (*Apis florea*)

'*Kottaan*' is shown in the small branches in the trees and shrubs by *Apis florea* bees. The honey hive is a miniature of the '*Vanthen*' hive. The top of the honey hive is fully covering the situated area of the branch. This honey is used for domestic purposes and will not sell.

(d). '*Karinthan*' (*Tetragonula iridepennis*)

'*Karinthan*' is produced by *Tetragonula iridepennis* in the gap of rocks or walls and the narrow space in the wooden boards in houses. '*Karinthan*' has a high medicinal and economic value compared to other kinds of honey.

### **3.3.3.1.2 Honey Hives Marking**

Honey hive marking is an important traditional customary activity practiced by the *Kadar* just before the honey extraction. Honey excavation is a much-appreciated job of *Kadar*. When the honey season starts, they will go to the forest for finding out the trees where honey bees have started making combs, and then they will differentiate (Mark) the tree with green leaves or put a mark on the bark of the tree with a knife. So that is already set aside. This is basically to ensure spotting of the honey comb by a particular person or group of individuals belong to a particular village, clan or community as similar to traditional hunting practice. This marking ensures others not to collect the honey as a very inclusive traditional custom.



### 3.3.3.1.3 Preparation & method of honey collection

#### 'Vanthen' collection

- Hive in Trees

*Kadars* reduce their body weight for easy climbing trees. At the beginning of the honey season, they prepare '*Thattaaan*' (stopples), '*Kottaapudi*' (hammer), '*Choodu*' (flambeau), etc. for honey collection. Bamboo (*Oxytenanthera bourdillonii* and *Bambusa bambos*) is used to make '*thattaaan*' and desiccate it in the sunshine to become stronger. '*kottaapudi*' is making from a tree that is named '*Kottaapudimaram*' (*Lepisanthes tetraphylla* (Vahl) Radlk., *Mallotus aureopunctatus* (Dalz.) Muell.) by the *Kadars*. They making of '*choodu*' by reeds and dried bamboo. When the preparations are getting ready, they are entering to the forest for searching honey hive. If *Kadars* discover any hive in trees they put down '*thattaaan*', '*choodu*', etc. at the bottom of the tree and continue this on other sites. The best time for honey collection is moonless nights. They will come back at night and pray to their deity for getting a lot of honey without any harmful incidents at their risky job. After the prayer, one person tacks the '*thattaaan*' with the '*kottaapudi*' like a step for climbing on the large tree. When he reaches near to the branch of the hive; hangs his tools and properties in stopple tacked on the tree trunk and move through the branch like a monitor lizard to reach near to the honey hive. Then they will fire the flambeau to fumigate the bees to drive away. After that, they will cut down the '*rat*' (Lower portion of the hive) to remove eggs and larva from the comb. Then incise the '*theli*' (part of hive filled with honey) and put it to the can. At last, they will cut down the '*pookkatti*' (Pollen) and clean the branch for the next season.

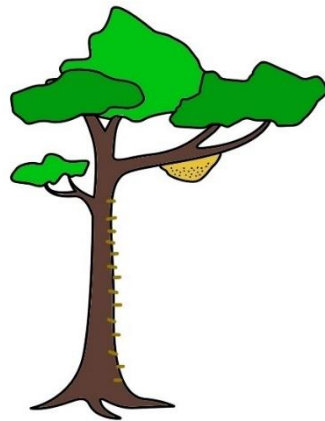


Fig. 3.16 Hive in Trees

### Hive in the cliff

*Kadar* make ladder with sturdy rope by '*Vakkanaaru*' (*Sterculia villosa*) or by '*Vallichooral*' (*Calamus travancoricus*). They will climb down the cliff via the ladder and will do the same as the honey collection method on the trees. Sometimes they use bamboo ladders along with the rope for climbing over the cliffs.

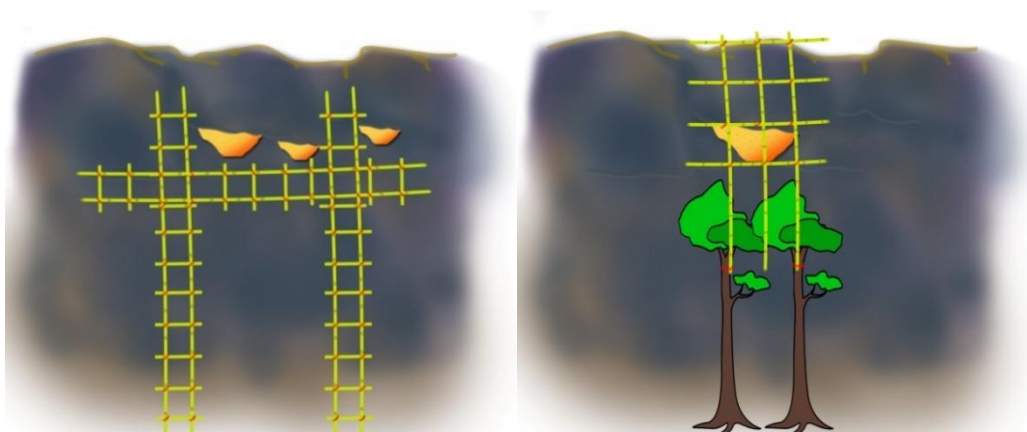


Fig. 3.17 Hive in the cliff

### 'Kurunnan', 'Kottan' and 'Karinthan' collection

The '*Kurunnan*' honeycombs are shown in the tree holes and anthills. '*Kottaan*' are shown in the small branches in the trees and shrubs and '*Karinthan*' nests are built in wall

crevices, trunks of trees, logs, or under the roofs of dwellings. After the fumigation process, they will collect the honey.



Fig.3.18 The 'Kurunna' honey extraction method

After the collection of 'Vanthen', 'Kottan' and 'Karinthan' filtered and stored in clean cans for selling. The 'Kurunna' filtration is done after heating the pieces of the comb.

#### 3.3.3.1.4 Ethnoecological knowledge on wild honey collection

April and May are the honey season and sometimes it varies to June month. Withered flowers are a good sign to finish honey collection by bees. The 'Elavan' (*Bombax ceiba*), 'Thaani' (*Terminalia bellirica*), 'Churuli' (*Mesua ferrea*), 'Vellapain' (*Vateria indica*), 'Paali' (*Palaquium ellipticum*), 'Punnapain' (*Calophyllum polyanthum*), 'Cheeni' (*Tetrameles nudiflora*), 'Maraavu' (*Ficus* spp.) and 'Vezhaavu' (*Lagerstroemia lanceolata*) are the most commonly chosen trees by giant honey bees for making colonies.

The colour, smell, and taste of honey is depending upon flowering trees. The honey has an aromatic smell and taste at the time of flowering of *Vateria indica* and the honey is clear transparent as freshwater but bees are very aggressive at the time of flowering. The flowering season of '*Kuntikodi*' (*Gnetum edule*) and '*Kaattukadukka*' (*Terminalia chebula*) make honey bitter. The honey clot like rock candy when flowering of bamboo and '*Kareetta*' (*Ochlandra travancorica*). The '*Eeti*' (*Dalbergia latifolia* Roxb.) flower makes honey dark. The '*Mulanthapoo*' (a climber) gives red colour and makes honey thick. The best honey in sense of taste is at the time of '*Elavan*' (*Bombax ceiba*) flower.

Table 3.28 Major plants used by *Apis dorsata* for making colonies.

Sl. No	Name of the plant	Family	IUCN status	Terminology of Kadar	Forest type
1	<i>Bombax ceiba</i> L.	Malvaceae	LC	<i>Elavan</i>	Moist deciduous and semi-evergreen forests, also in the plains
2	<i>Calophyllum polyanthum</i> L.	Calophyllaceae	NE	<i>Punnain</i>	Evergreen forests
3	<i>Ficus benghalensis</i> L.	Moraceae	NE	<i>Kallich</i>	Evergreen to deciduous forests; and cultivated around villages.
4	<i>Ficus callosa</i> Willd.	Moraceae	NE	<i>Velmaraavu</i>	Semi-evergreen and moist deciduous forests, also in the plains

5	<i>Ficus microcarpa</i> L. f.	Moraceae	LC	<i>Kannayanima raavu</i>	Evergreen and semi-evergreen forests, also in the plains
6	<i>Ficus nervosa</i>	Moraceae	LC	<i>Chola maraavu</i>	Semi-evergreen and evergreen forests
7	<i>Ficus racemosa</i> L.	Moraceae	LC	<i>Athi / Maraavu</i>	Evergreen to moist deciduous forests; and cultivated.
8	<i>Lagerstroemia lanceolata</i> Wall.	Lythraceae		<i>Vezaavu</i>	Deciduous and dry evergreen forests
9	<i>Mesua ferrea</i> L.	Calophyllaceae	NE	<i>Churuli</i>	Evergreen forests
10	<i>Palaquium ellipticum</i> (Dalzell) Baill.	Sapotaceae	LC	<i>Paali</i>	Evergreen forests
11	<i>Terminalia bellirica</i> (Gaertn.) Roxb.	Combretaceae	NE	<i>Thaani</i>	Mixed forest, deciduous forest, primary forests, sal forest



12	<i>Tetrameles nudiflora</i> R. Br	Tetramelaceae	LC	<i>Cheeni</i>	Evergreen, semi-evergreen and moist deciduous forests, also in the plains
13	<i>Vateria indica</i> L.	Dipterocarpaceae	VU	<i>Vellapain</i>	Near streams and moist places of evergreen forests of the Western Ghats

Table 3.29 The major plants' list that is influencing colour, taste, smell, and character of the wild honey

Sl. No	Name of the plant	Family	IUCN status	Terminology of <i>Kadar</i>	Colour, taste, smell, and character of the wild honey
1	<i>Bambusa bambos</i> (L.) Voss	Poaceae	NE	<i>Mula</i>	Honey clots like rock candy
2	<i>Bombax ceiba</i> L.	Malvaceae	LC	<i>Elavan</i>	Best in taste
3	<i>Dalbergia latifolia</i> Roxb.	Fabaceae	VU	<i>Eeti</i>	Black
4	<i>Dendrocalamus strictus</i> (Roxb.) Nees	Poaceae	NE	<i>Mula</i>	Honey clots like rock candy

5	<i>Gnetum edule</i> (Willd.) Blume	Gnetaceae	NE	<i>Kuntikodi</i>	Bitterness
6	<i>Ochlandra setigera</i> Gamble	Poaceae	NE	<i>Velleetta</i>	Honey clots like rock candy
7	<i>Ochlandra</i> <i>travancorica</i>	Poaceae	NE	<i>Kareetta</i>	Honey clots like rock candy
8	<i>Pseudoxytenanthera</i> <i>bourdillonii</i> (Gamble) H.B.Naithani	Poaceae	NE	<i>Arayambu</i>	Honey clots like rock candy
9	<i>Terminalia chebula</i> Retz.	Combretaceae	LC	<i>Kaattukadukka</i>	Bitterness
10	<i>Vateria indica</i> L.	Dipterocarpaceae	VU	<i>Vellapain</i>	Transparent, aromatic smell and taste
11	Unidentified climber			<i>Mulanthapoo</i>	Red, thick honey

According to *Kadar*, some animals and birds (Leopard, Tiger, Oriental dollar bird, and Honey-buzzard) eat the 'ratt' region of the hive. The Sloth bear and Brown mongoose eat the honeycomb as a whole.

The *Kadar* never gathers honey during moonlight because that time bees are very aggressive. They improve the medicinal value of wild honey by mixing honey collected from different hives during the season. They use '*Karinthan*' for babies to quick starting of verbal communication '*Kottaan*' is used for glaucoma. They will eat the eggs and larvae in the '*ratt*' from the first harvested hive for resisting the pain and swelling in the body by bee bite.

Bee wax is one of the by-products of the honey hive. It is also a source of income and traditionally sold as MFP. When they temporarily stay in the forest for collecting MFPs, they use honey wax for candle. The nodal region of the reed and its sleeve is used to make the candle. *Kadar* cleans the branches of the honey comb tree for helping the honeybee to build the hive for next season. The face of the hole becomes bigger while collecting '*Karinthan*' honey from the gaps of rocks and tree holes; they close the face of the hole partially with small rocks for helping bees to make hives. *Kadars* know the vital role played by honey bees as important pollinating agents. They believe the deity gave the responsibility to the bees for pollination to ensure offset of the next generation.

Generally, the *Kadars* collect only the essential products from the forest as a traditional custom of practicing sustainability. Many beliefs and taboos are the key factors to ensure sustainable and inclusive honey collection. The marking of honey and ability to harvest is considered as one of the activities which symbolize ability and potential of a *Kadar* man. Dispute among *Kadar* on honey collection is hardly heard.

### **3.3.3.2 Fishing among *Kadar***

#### **3.3.3.2.1 Traditional methods**

##### **a. Angling**

Fishing rad and rope made up of different plants. That are given below.

Table 3.30 Plants used for angling by *Kadar*

Sl. No	Name of the plant	Family	Terminology of <i>Kadar</i>	Part & Use
1	<i>Miliusa tomentosa</i> (Roxb.) J. Sinclair	Annonaceae	Nedunaru	Bark used as fishing rope.
2	<i>Monoon coffeoides</i> (Thwaites ex Hook. f. & Thomson) B. Xue & R. M. K. Saunders	Annonaceae	Nedunaru	Bark used as fishing rope.
3	<i>Monoon fragrans</i> (Dalzell) B. Xue & R. M. K. Saunders	Annonaceae	Nedunaru	Bark used as fishing rope.
4	<i>Caryota urens</i> L.	Arecaceae	Pana	Peduncle of leaves used as fishing rope.
5	<i>Trema orientale</i> (L.) Blume	Cannabaceae	Amai thali naaru	Bark used as fishing rope.
6	<i>Bauhinia racemosa</i> Lam.	Fabaceae	Aarampuli	Bark used as fishing rope.
7	<i>Helicteres isora</i> L.	Malvaceae	Chenari, Kaivan	Bark used as fishing rope.
8	<i>Ficus racemosa</i> L.	Moraceae	Athi / Maraavu	Bark used as fishing rope.
9	<i>Ficus travancorica</i> King	Moraceae	Vilmaraavu	Bark used as fishing rope.
10	<i>Ochlandra scriptoria</i> (Dennst.) C. E. C. Fisch.	Poaceae	Veyi	Culm is used as fishing rod.
11	<i>Ochlandra setigiera</i> Gamble	Poaceae	Velleetta	Culm is used for making traditional fish trap and fishing rod.

12	<i>Ochlandra travancorica</i> (Bedd.) Benth	Poaceae	Kaareetta	Culm is used for making traditional fish trap and fishing rod.
13	<i>Schizostachyum beddomei</i> (C. E. C. Fisch.) R. B. Majumdar	Poaceae	Noonjooru	Culm is used for making fishing rod.
14	<i>Sterculia villosa</i> Roxb.	Sterculiaceae	Aananaaru, vakkanaaru	Bark used as fishing rope.
15	<i>Grewia tiliifolia</i> Vahl	Tiliaceae	Chadachi / Unnam	Bark is used as fishing rope.
16	<i>Debregeasia longifolia</i> (Burm. f.) Wedd.	Urticaceae	Kanavanchi	Bark is used as fishing rope.
17	<i>Oreocnide integrifolia</i> (Gaud.) Miq.	Urticaceae	Kanavanchi	Bark is used as fishing rope

#### **b. Plate method**

This method is usually used by children and women to catch small fish from rivers and streams. They cover a normal steel bowl or plate with a cloth and put cooked rice as food inside it. They put few holes on the cloth and keep it immersed in the water. Also pour some cooked rice around the plate outside in the water to attract fishes. The small fishes are trapped inside the cloth when they come to eat the rice inside the plate. This is a simple and sustainable way of trapping fishes for their daily meal during forest dwelling.

#### **c. Fish traps**

Fish traps are made up of reeds. It's used in rivers and deep streams.

#### **d. Cloth method**



A long cloth was taken and one end tied in the neck region and one end taken on hands. Then it slowly dipped in water. Waiting for small fish to come into the cloth, when fish are trapped in the cloth, they collect them.

**e. Herbal fish-stupefying agent.**

Many plants were used as fish stupefying agent, It is an easy method to catch fish. The plants according to the *Kadars* are given below.

Table 3.31 Plants used as fish stupefying agent by *Kadar*

Sl. No	Name of the plant	Family	Terminology of <i>Kadar</i>	Part used
1	<i>Caryota urens</i> L.	Arecaceae	Pana	Fruits
2	<i>Dillenia pentagyna</i> Roxb.	Dilleniaceae	Punna/ Vazhapunna	Fruits
3	<i>Diospyros cordifolia</i> Roxb.	Ebenaceae	Vakkanamaram	Leaves, Branches
4	<i>Acacia sinuata</i> (Lour.) Merr.	Fabaceae	Pulinchika, Pulichi	Fruits
5	<i>Acacia torta</i> (Roxb.) Craib	Fabaceae	Choppaneenga	Fruits
6	<i>Strychnos nux-vomica</i> L.	Loganiaceae	kanjiram	Fruits, Leaves
7	<i>Anamirta cocculus</i> (L.) Wight & Arn.	Menispermaceae	Pollakaya	Fruits
8	<i>Bambusa bambos</i> (L.) Voss	Poaceae	Mula	Tender shoot
9	<i>Dendrocalamus strictus</i> (Roxb.) Nees	Poaceae	Mula	Tender shoot
10	<i>Pseudoxytenanthera bourdillonii</i> (Gamble) H. B. Naithani	Poaceae	Arayambu	Tender shoot

11	<i>Canthium rheedei</i> DC.	Rubiaceae	Karakkay	Fruits
12	<i>Sapindus trifoliatus</i> L.	Sapindaceae	Ullurinja, Urunchikaya, Poochakotta	Fruit
13	<i>Cycas circinalis</i> L.	Cycadaceae	Eenthadaaku	Bark

### 3.3.3.2 Other methods

#### a. Gill net

The gill trapping fish net popularly known as gill net are also used by *Kadars* for regular fishing in the rivers as the reservoirs in large scale. The gill nets are used in a regular manner where the blots are fixed at one side and the weight or stones in the lower side keeping the net vertical in the water. Traditional bamboo rafts are used for spreading the net usually in the evening and the late night and the fishes were collected early in the morning.

### 3.3.3.2.3 Ethnoecological knowledge and breeding biology of Fish

The important fishes seen in the rivers of the Anamalai mountain land scape especially in the catchments of Chalakkudy, Periyar and Bharathapuzha are migratory from lower river stretches to upper reaches at least for breeding. The *Kadars* know the fishes, migration routes and the important habitats within the river. The fishing is one of the important aspects of their nutrition and livelihood. Hence, most of the *Kadar* have deep practical knowledge about fishes and their ecology. They use above 33 fishes and they have knowledge about breeding biology, fish migration, and habitat. The Tor fishes (Choor) select the roots of trees for laying eggs. *Rasbora dandia* (Kanayaan), *Haludaria fasciata* (Kariyaan / Kariyaathi), *Labeorohita* (Rogu), *Hypselobarbus pulchellus* (Eettavetti / Eettapachilavetti), *Devario malabaricus* (Polaantha), *Cyprinus carpio* (Kalivu), *Catla catla* (Kalivu), and *Barbodes carnaticus* (Pachilavetti) lay eggs in between the grasses in the water

and also migrate upstream. *Hypselobarbus kolus* (Kuzhikuthi Kooral) is laying eggs on the grasses in the banks of rivers or streams. *Garra mullya* (Kallotti / Moykmeen), *Dawkinsia filamentosa* (Pandan / Pakiri), *Dawkinsia assimilis* (Pandan) and *Barilius* (Paavaayi) also migrate to small streams from the rivers. The *Kadars* mention hunting of fishes by the tigers, sloth bears and civets apart from otters and owls.

### 3.3.3.3 Collection of Minor Forest Produces (MFPs)

The major part of the income come from the MFPs. The *Kadars* depend more on forest produces from the evergreen forests compared any other tribal group in Kerala. They have knowledge about MFPs available in various seasons.

Table 3.32 *Kadars* knowledge about MFPs available in various seasons.

Sl. No	Name of the plant	Family	Terminology of <i>Kadar</i>	Season
1	<i>Hydnocarpus alpina</i> Wight	Achariaceae	Vetti	May - July
2	<i>Hydnocarpus pentandrus</i> (Buch.-Ham.) Oken	Achariaceae	Vetti	May - July
3	<i>Decalepis hamiltonii</i> Wight & Arn.	Apocynaceae	Magaalikizhangu	All season
4	<i>Arisaema tortuosum</i> (Wall.) Schott	Araceae	Naagaanthi, Naagaraanthi	May - June
5	<i>Arisaema tortuosum tortuosum</i>	Araceae	Naagaanthi, Naagaraanthi	May - June
6	<i>Canarium strictum</i> Roxb.	Burseraceae	Kannaadithelli, Thelli, Thellipayin	All season
7	<i>Garcinia gummi-gutta</i> (L.) Robs.	Clusiaceae	Puliyotta	May - June

8	<i>Terminalia bellirica</i> (Gaertn.) Roxb.	Combretaceae	Thanni	December- January
9	<i>Terminalia chebula</i> Retz.	Combretaceae	Kadukka	May - July
10	<i>Vateria indica</i> L.	Dipterocarpaceae	Vellapayin/Undapayin	All season
11	<i>Elaeocarpus tuberculatus</i> Roxb.	Elaeocarpaceae	Paumb	July - August
12	<i>Acacia sinuata</i> (Lour.) Merr.	Fabaceae	Pulinchika, Pulichi	March - April
13	<i>Pueraria tuberosa</i> (Willd.) DC.	Fabaceae	Paalmuthukku	May - June
14	<i>Cinnamomum bejolghota</i> (Buch.- Ham.) Sweet	Lauraceae	Lavangapatta	May - June
15	<i>Phyllanthus emblica</i> L.	Phyllanthaceae	Nellika	February - April
16	<i>Piper barberi</i> Gamble	Piperaceae	Kattukurumulak	May - September
17	<i>Piper longum</i> L.	Piperaceae	Thuppali/Thuppili/Thippili	September - November
18	<i>piper mullesua</i> Buch.-Ham. ex D. Don	Piperaceae	Kattukurumulak	May - September
19	<i>Piper nigrum</i> L.	Piperaceae	Kurumulak	May - September
20	<i>Cymbopogon citratus</i> (DC.) Stapf	Poaceae	Thailappullu	August - September
21	<i>Curcuma caesia</i> Roxb.	Zingiberaceae	Karimkoova	February - May

### 3.3.4 Ethnoecological knowledge on livelihood practices by *Malasar* ethnic community.

#### 3.3.4.1 Different kinds of Wild honey, season, and processing method

The wild honey collection not considered as an important livelihood option for *Malasar* compared to *Kadar*. Villages inside the forest are only involved in wild honey collection. Most of *Malasar* collect only Kombuthen (*Apis florea*) and port kolan then (*Tetragonula iridipennis*). Adakkuthen (*Apis cerana indica*) and Malathen (*Apis dorsata dorsata*), honey comb on the cliffs and trees are collected experts from the community and the method of harvest is almost similar to that of the *Kadar*.

#### 3.3.4.2 Fishing

*Malasar* use angling and gill nets commonly for catching fishes from rivers, streams and reservoirs. They use slender branches of available small trees or shrubs as pole for angling fishes, earthworms or wheat or rice balls as the bait. Gill nets are also available in the market, *Malasar* are also familiar with this method especially for fishing from the reservoirs.

#### 3.3.4.3 Collection of Minor Forest Produces and medicinal plants.

*Malasar* ethnic community more depend on medicinal plants compared to other forest produces such as black dammar (*Canarium strictum*) and, white dammar (*Vateria indica*). The community living in Parambikulam Tiger Reserve area and adjacent to the forest depend MFPs other than medicinal herbs. The MFPs used by the *Malasar* are as follows.

Table 3.33 *Malasars* MFPs & medicinal plants.

Sl. No	Scientific Name	Family	Habit	Terminology of <i>Malasar</i>
1	<i>Abrus precatorius</i> L.	Fabaceae	Climber	Kunnikkuru
2	<i>Adathoda beddomei</i> C. B. Cl.	Acanthaceae	Shrub	Adalodakam



3	<i>Asparagus racemosus</i> Willd.	Asparagaceae	climber	shathavalli
4	<i>Boerhavia diffusa</i> L.	Nyctaginaceae	semi- erect shrub	Thamizhama
5	<i>Capsicum frutescens</i> L.	Solanaceae	Shrub	Kanthari
6	<i>Cardiospermum halicacabum</i> L.	Sapindaceae	Climber	Niravalli (Uzhinja)
7	<i>Cissampelos pariera</i> L.	Menispermaceae	Climber	Janamkolli
8	<i>Clematis zeylanica</i> (L.) Poir	Ranunculaceae	Shrub	Vathakodi
9	<i>Clitoria ternatea</i> L.	Fabaceae	climber	Shangupushpam
10	<i>Curculigo orchioides</i> Gaertn.	Hypoxidaceae	herb	Nilappana
11	<i>Cyanthillium cinereum</i> (Carl Linnaeus) H. Rob	Asteraceae	herb	Poovamkurunal
12	<i>Decalepis hamiltonii</i> Wight & Arn.	Apocynaceae	climber	Makaalikilangu
13	<i>Desmodium gangeticum</i> (L.) DC.	Fabaceae	herb	Orala
14	<i>Eclipta prostrata</i> L.	Asteraceae	herb	Kanjunni
15	<i>Helicteres isora</i> L.	Malvaceae	Shrub	ValampiriIdampiri
16	<i>Hemidesmus indicus</i> (L.) R. Br.	Apocynaceae	Semierec t shrub	Nanari

17	<i>Leucas aspera</i> (Willd) L.	Lamiaceae	herb	Thumba
18	<i>Mimosa pudica</i> L.	Mimosaceae	Shrub	thottavadi
19	<i>Ocimum tenuiflorum</i> L.	Lamiaceae	Shrub	Thulasi
20	<i>Pandanus foetidus</i> Roxb.	Pandanaceae	Shrub	Kaitha Uzhi
21	<i>Phyllanthus emblica</i> L.	Phyllanthaceae	Tree	Nellika
22	<i>Piper longum</i> Miq.	Piperaceae	climber	Thippali
23	<i>Piper nigrum</i> L.	Piperaceae	climber	Kurumulaku
24	<i>Pseudarthria viscida</i> (L.) Wight & Arn.	Fabaceae	Shrub	Mukala
25	<i>Pterocarpus marsupium</i> Roxb.	Fabaceae	Tree	Venka
26	<i>Ricinus communis</i> L.	Euphorbaceae	Shrub	Avanakku
27	<i>Ehretia aquatica</i> (Lour.) Gottschling & Hilger	Boraginaceae	Shrub	Kallurvanchi
28	<i>Salacia reticulata</i> Wight	Celastraceae	Shrub	Eakanayakam
29	<i>Sida rhombifolia</i> L.	Malvaceae	Shrub	Kurunthotti
30	<i>Terminalia arjuna</i> (DC.) Wight & Arn.	Combretaceae	tree	Neermaruth
31	<i>Terminalia bellirica</i> (Gaertn.) Roxb.	Combretaceae	tree	Thanni
32	<i>Tinospora cordifolia</i> (Willd.) H. k. Thomson	Menispermaceae	climber	Chittamruth
33	<i>Vitex negundo</i> L.	Lamiaceae	Shrub	Karinochi

### 3.4 SUMMARY AND CONCLUSION

The present chapter brought out the ethnoecological knowledge especially the medicinal, economical and livelihood aspects related to ethnofloristic and ethnofaunal knowledge of *Kadar* and *Malasar*. The ethnoecological knowledge of the *Kadar* community about 351 species of flora and 50 species of fauna is documented in this chapter. Whereas this chapter describes the ethnoecological knowledge of the *Malasar* community about 186 species of flora and 14 species of fauna. All these are categorized here as their knowledge of ethnomedicine, economic use, MFP, livelihood, and so on.

## ***Chapter 4***

# **ETHNOECOLOGY OF *KADAR* AND *MALASAR*: TERRAIN, CLIMATE, FOREST TYPES, ECOLOGICAL RELATIONSHIPS AND THEORIES**

## **4.1 INTRODUCTION**

The Western Ghats mountains of the South India has amazing ecological history and which had been shaped with the ancient geological history of the movement of Indian plateau and are reflected in the topographical and terrain features and the present biota. Rugged terrain, deep valleys, waterfalls, dense forest, an assemblage of great valley heads and spurs, and a variety of landforms make it a more diverse and complex mountain chain in the peninsula. The Western Ghats is the watershed of all the important rivers in south India. All are shaped with the various kinds of ecosystems especially of the moist tropical and montane apart from the dry tropical situations in the peninsula and are well represented in the Anamalai hills.

The Anamalai landscape is considered one among the important three biodiversity hotspot within the Western Ghats – Sri Lanka biodiversity hotspot recognised globally. The highest mountain chains of the Ghats including the Anamalai Peak and the Eravikulam region at the southern boundary bordering the High ranges in Munnar, Pooyamkutty-Edamala valleys, Parambikulam valleys, Valparai-Plateau, and Nelliampathy hills adjacent to the unique Palghat gap, an opening to the dry Deccan plateau in the East coupled with North-South orientation intersecting the monsoons defines the Anamalai Landscape where the *Kadar* and *Malasar* indigenous community exist.

These valleys are rich in their forest wealth represented by tropical moist, montane, and dry forest types within nearly six bioclimatic zones in the landscape (Bachan, 2010). The



areas were prone to massive resource extraction in the colonial period with the foremost and important Tea plantations in Valparai and Teak plantations in the Parambikulam Valley. There were timber extractions in the colonial periods in the Parambikulam Topslip region through Topslip and Coimbatore towards the west and the famous Parambikulam Tramway, a railway operated from Parambikulam to the Chalakkudy township in Thrissur district, Kerala. The Anamalai road from Chalakkudy town up to Valparai also forms as part of the timber extraction. The first working plan of the forest in the region were also for the extraction of timber and that along the Anamalai road could be the first post independent working plan in the Vazhachal Division. The tropical rainforests in the Sholayar Valley were extracted for plywood industries (Bachan, 2010).

The trajectory forest degradation had serious impact on the resources of the community and especially the ancient dwellers such as *Kadar* were displaced many times. This continued when the river valley project and the dams and reservoirs came in with the first one, the Poringalkuthu Dam commissioned during 1958. There could be nearly 11 large dams in the landscape of which are within the Chalakkudy river basin strictly submerging rich forested valleys of the *Kadars* domain (Bachan and Devika, 2020). The *Malasar* supposed to come into the valleys with such forestry and timber operations from the eastern plains and foothills of Tamil Nadu and Palakkad Gap. The oil palm plantations along the river and most of the Teak plantations in the regions are post independent and chiefly came during 1960-80s.

The ethnoecology means the autecological and synecological knowledge existing with the indigenous community. This could be chiefly their knowledge on terrain, climate and season as the abiotic environment and that of the ecological relationships of organisms with their surrounding nature as well as among them. The Traditional Ecological Knowledge

(TEK) documentation was recently developed in the scientific world. TEK contributes to the conservation of biodiversity (Gadgil *et al.* 1993, Nair,1993). It also helps to conserve unique ecological areas (Johannes, 1998) concerning spirituality and myths. Community-based species conservation (Colding, 1998), conservation and sustainable ecological resource utilization have been taking place through documentation of TEK. The Community based Hornbill nest Tree monitoring and conservation involving *Kadar* ethnic community in the landscape has become a flagship program which brought conservation action and the role of the indigenous community (Parbhu *et al.*, 2005; Bachan, 2006; Bachan *et al.*, 2019; Shaji 2019).

Some preliminary observations of the *Kadar* community can be obtained from Bachan *et al.*, (2014) where the knowledge base and its transactions were discussed, Vineesha and Bachan (2016) provides preliminary observations of ethnobotanical knowledge including some observations on the ecological part such as their terminology for rainforest as ‘*Adavi*’ and for wetlands in the forests as ‘*Pathal*’. Some of their knowledge on Hornbills and nesting trees were obtained from Bachan *et al.*, (2019) on the experience of *Kadar* indigenous community-based hornbill conservation. The UN has declared need of recognition of the Indigenous communities’ traditional right over land, common resource and decision making as essential step in restoration of indigenous world and the natural resources (UNDRIP, 2007). This has been reflected in the Forest Right Act (2006) enacted in the Indian Parliament. These are considered important steps in ensuring conservation and sustainable use of bioresources across the globe. The first and foremost initiative to settle the Community Forest Right as defined in Section 5 of FRA (2006) was initiated in the landscape (Bachan *et al.*, 2016) for the *Kadar* community and extended up to the entire Thrissur District in Kerala part of Anamalais where they have recorded traditional landmarks of *Kadar* and *Malasar*

which is one of the vital sources of authentic data collection regarding the terrain features in the landscape.

Every community acquire their ecological knowledge through years of experiences, observation, predictions and repetitions in contact with the immediate environment. The complexity of the terrain, ecosystems and biota brings and antiquity of the people brings more complex and diverse knowledge. All these knowledge, concepts and theories were recorded and transferred orally as myths, beliefs and stories by the communities. Bachan *et al.*, (2016) observe the knowledge is dynamic and being updated even now while citing new terminologies and definitions appeared among the *Kadar* community. They necessitate the need of documentation and developing documents for practice among the Indigenous community in this time of transitions from verbal education to the modern means.

#### **4.2 METHODOLOGY**

The data pooled here in the study has special session to collect various kinds of indigenous knowledge indicating the ecological knowledge apart from the ethnobotanical and ethnozoological nomenclature. These include the documentation of terrain features, seasons, climate, and forest types. The names of places were collected from the Community Forest Resource (CFR) area map of the *Kadar* community. Community Forest Resource (CFR) area map was done by the Hornbill Foundation for nine *Kadar* settlements of the Athirapilly and Mattathur panchayath during 2010 – 2011. The procedure followed for mapping was by first listing out of all the traditional landmarks of the Minor Forest Produce (MFP) collection area, other resource use, and land use. These were later converted into a large sheet of paper and care was taken to have maximum landmarks for more clarity. The photocopies of the toposheets or computer images with the help of the Geographical Information System (GIS) were used for more clarity for the facilitation team. The maps contain traditional landmarks,

CFR boundary, various resources and their collection areas, their statuses such as resource-rich and depleted areas, and marking all-important geographical and topographical features including mountains, hills, streams, and forests. The area had to be identified in discussion with elders and important informants in a '*Gram Sabha*' (GS) gathering by the Forest Right Committee (FRC). Marking of these areas using the traditional terminology and their dialect is mandatory because it is the only way to prove that the mapping process has covered the traditional resource use area, it is done by the particular '*Adivasi*' GS members, and also allows for validation of the map at a time when an issue or complaint arises.

The documented terminologies were further enquired in other *Kadar* settlements and confirmed the correct terminologies with help of photographs. During the field visit, conducted a discussion with *Malasar* by using the participatory rural appraisal method (PRA) (Coghlan and Miller, 2014). Terrain terminologies are collected from *Malasar* through discussion about different land areas with the help of photographs. Confirmed the data by communicating with *Malasars* in different settlements. The different climates and forest types were recorded with photographs.

Knowledge about the different ecological relationships like Prey – Predation, commensalism, parasitism, mutualism, and competition were categorised. The Autecological knowledge obtained from different livelihood related information. The main livelihood is the fishing so they provided enough information on fish, its breeding biology, distribution and habitat fish and so on other species. Synecology, they are the forest dwellers, so they use many natural resources like honey, timber etc but don't explore any natural resources, they considered all organisms in nature and also conserve them and different concepts and key words of the *Kadar* and *Malasar* on the ecological functions like seed dispersal (hornbills helps to seed dispersal), pollination, falling of leaves in the summer season etc. are documented through a participatory rural appraisal method. This study documents how they

understand the ecological theories and different concepts of the Kadar and Malasar on different ecological theories like succession, species colonization, etc. The data were pooled from the questionnaire and through oral communications with forest dwellers. Make sure the people's perceptions from each settlement. Some of the secondary data were pooled from various scientific papers.

## **4.3 RESULT AND DISCUSSION**

### **4.3.1 Terminologies of terrain features used by the *Kadar* ethnic community**

The historic Forest Rights Act of 2006 for the first time provided scope for the recognition of the Particularly Vulnerable Tribes (PVTGs) and habitat rights. Section 2 (h) of the FRA defines habitat as ‘Habitat includes the area comprising the customary habitat and such other habitats in reserved forests and protected forests of primitive tribal groups and pre-agricultural communities and other forest-dwelling Scheduled Tribes’. It involves the Community Forest Resource (CFR) area of a tribal community which is the forest resource collection area that has been used traditionally (Sec. 5. of FRA, GOI, 2006). A combination of all the CFRs of a PVTG tribe recognizes their ‘Habitat’ (Sec. 3 (1) e. of FRA, GOI, 2006). The CFRs of nine settlements of *Kadar* in the Vazhachal areas and Anapantham were mapped and the community rights were issued during the 2012-14 period (Bachan *et al.*, 2016). According to the present study each traditional landmark was named based on the terrain, a related myth, history or story, the peculiar shape of the rock or hill in that area, and some landmark species. All the terrain names and their types in ethnic language are provided below for *Kadar* (Table 4.1.) and *Malasar* (Table 4.2.).

Some important observations are; '*Karimala Gopuram*' or the ‘Karimala hills’ is the tallest mountain (1400 m high) in the *Kadars* domain. This mountain is considered sacred for the *Kadar* tribe where the '*Karimala*' meaning dark mountain and the '*Gopuram*' denotes the



peak. Normally '*Gopuram*' means a pyramidal shape and the distant view of the peak is pyramidal. They also name rocky areas based on the shape they are familiar with. For example, the name '*Madampura*' came from the word '*Pura*' which means a mode of dressing by *Kadar* tribes, consisting in passing a wide scarf over one shoulder drawn down on the opposite waist to carry something. There is a rock in the shape of '*pura*'. '*Madampura*' is a confluence point of '*Ambalapara*' rivulet, '*Karimala*' rivulet and '*Meenchalali*' rivulet, draining to the Sholayar tributary of the Chalakkudy River. '*Chenavara*' is a cliff in the shape of the Elephant Foot Yam. Here '*Chena*' means Elephant Foot Yam (*Amorphophallus paeoniifolius*) and '*Vara*' means Cliff. According to *Kadar* the '*Kuth*' means waterfalls where many popular waterfalls in the region named by them. '*Poringalkuth*', '*Mechappillikkuth*', '*Meenchalalikuth*' and '*Anamanadankuth*' are examples.

There are some landmarks named based on the complexity of the terrain for example '*Keezhmayikal*' and '*Melmayikal*', these two-place confusing directions. Meaning of the word '*Mayikal*' is confusing. The '*Kozhimodak*' is a sacred area. Some landmarks were named after some of the historical incidents. An ancestor of *Kadar* named '*Chandan*' who guided the contractors through a bank of a rivulet for transporting wood from '*Pathadipaalam*' during the period of dam construction and this place is called '*Chandanthodu*'. The magazine (area where explosives were kept) named '*Thottapura*' during the construction period of '*Ambalapara*' dam (Lower Sholayar Dam). Where the word '*Thotta*' means dynamite or explosive item and '*Pura*' means house or warehouse. Some places were named after some species. They are; '*Murukiliyal*' and '*Karithalakoodali*'. The name '*Murukiliyal*' comes from the Indian Coral Tree (*Erythrina variegata*). The place is near a large Indian Coral Tree situated where *Kadars* usually make temporary huts during MFP collection. The case of '*Karithalakoodali*'; '*Karithala*' is one kind of snake head fish (*Channa gachua*). This fish is not common in upstream of rivers or rivulets but is found in that particular zone of a rivulet.

They use the word 'Aali' as a suffix to denote a person or personality or making a particular object to a noun or person. The place has a unique identity, so they are treated as a person. For example: 'Murukiliyali', and 'Meenchalali'.

The present study revealed more on some of the observations of Bachan *et al.*, (2016) that the *Kadars* have unique terminologies for each terrain feature of their surroundings such as mountains, rocks, valleys, rivers, rivulets, etc. These are comparable with The five major terrain features Hill, Ridge, Valley, Saddle, and Depression and the three minor terrain features: Draw, Spur, and Cliff provided by (Hutchinson *et al.*, 1996). Here all the topographical features were named similarly, usually adding a suffix or an adjective, that refers to a sub-feature indicating their relationship or knowledge. The present study documented 32 such terminologies of which 25 are unique to *Kadar* that are not used in Tamil or Malayalam regional languages.

Table 4.1. Terminologies for Terrain features by *Kadar* ethnic community

Sl. No.	<i>Kadar</i> Terminology	English	Examples
1	'Gopuram'	Peek	'Karimalagopuram'
2	'Mudi' / 'Kunnu' / 'Kuntu' / 'Mala'	Mountain/Hill	'Shekkalmudi', 'Veetikkunnu', 'Valerumala'
3	'Paramudi' / 'Kuntappaara'	Rocky Hill	
4	'Kuntinthala'	Hill Top	
5	'Thandu'	Ridge	'Kizhakkekkuthandan'
6	'Vara'	Cliff	'Chenavara', 'Velvara'
7	'Kuzhi' / 'Kudaal'	Depression	'Thavalakuzhipara',

			'Podukuzhi'
8	'Pallam' / 'Kuntathotty'	Saddle	'Koodalpallam'
9	'Pallathak'	Valley	
10	'Othuk'	Spur	
11	'Pural'	Open Rocky Area	'Kottippural'
12	'Aru' / 'Aattu' / 'Puzha'	River	'Mukkumpuzha'
13	'Chal' / 'Thodu'	Rivulet	'Vazhachal', 'Meenchalali', 'Chandanthodu', 'Karamthodu'
14	'Thalachi'	Stream	'Ilamthalachi'
15	'Kuth'	Waterfall	'Poringalkuth', 'Mechappillikkuth'
16	'Kooty' / 'Koodal'	Confluence of Rivers / Rivulets	'Orukombankooty', 'Karithalakoodali', 'Koodal'
17	'Adapputhanni'	Perennial Spring	'Adapputhanni'
18	'Kulam' / 'Kulaam'	Pond	'Kulamaali'
19	'Pathal' / 'Paruthapaadam'	Swamp	
20	'Madu' / 'Medu' / 'Paadam'	GrassLand/shola grassland	'Melmadu', 'Choozhimedu', 'Parachipadam', 'Puliyarampadam'
21	'Kadu'	Grove/Forest	'Ennankadu'

22	'Adavi'	Wet Evergreen forests	
23	'Cholakkaadu'	Shola Forest	
24	'Pachakkaadu'	Evergreen Forest	
25	'Kalakkaadu'	Evergreen Forest but not thick	
26	'Velinkaadu'	Degraded Forest/ Dry deciduous forest	
27	'Kalkkaadu'	Rocky Forest	'Kalkaduthodu'
28	'Ala' / 'Paaravangu'	Cave	'Vaavalala', 'Neerala'
29	'Para'	Rock	'Ambalappara', 'Chooralvalichapara'
30	'Palam'	Bridge	'Pathadipaalam'
31	'Kavala'	Junction	'Kavala'
32	'Mukkumvazhi'	Y/T Junction	'Mukkumvazhi'



Fig. 4.1 Terrain features: Peek and Hill / Mountain.

#### 4.3.2 Terminologies of terrain features used by the *Malasar* ethnic community

The *Malasar* indigenous community also has their own way of identifying terrain or topographical features. There was no previous record since the CFR or traditional resource areas were not mapped for them. They commonly use the vocabulary found in either Malayalam or regional languages. Among the 11 terminologies identified three are unique to them for example '*Koha*' meaning depression, '*Pallathak*' meaning valley and '*Othuk*' meaning spur. Some of the terminologies are of *Kadar* origin viz. '*Puarl*', '*Pallam*' and '*Thandu*'.

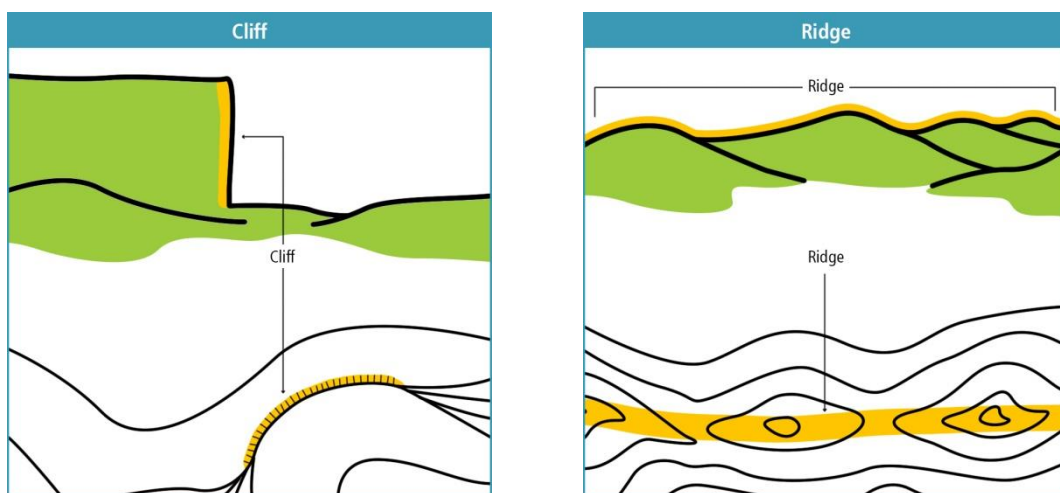


Fig. 4.2 Terrain features: Cliff and Ridge.

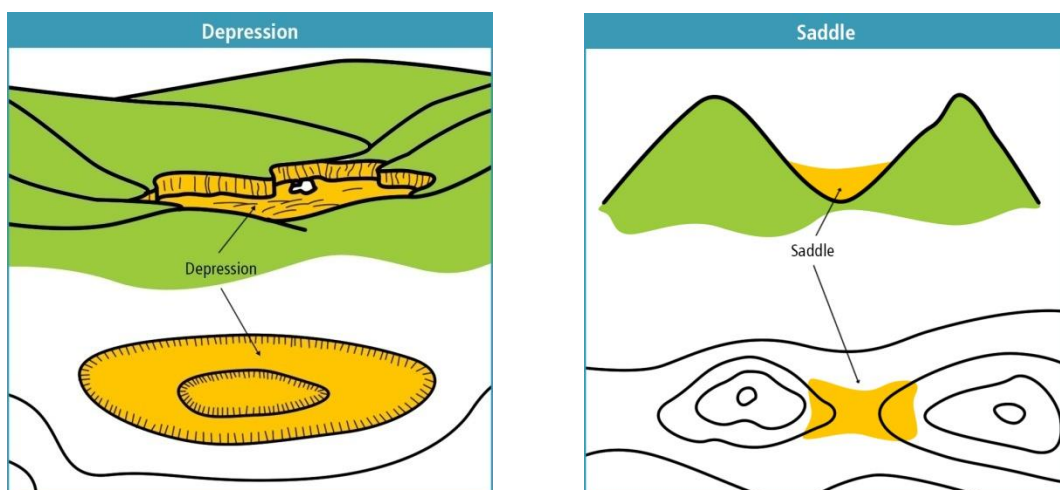


Fig. 4.3 Terrain features: Depression and Saddle.

Table 4.2. Terminologies for Terrain features by *Malasar* ethnic community



Sl. No.	Malasar Terminology	English
1	'Gopuram'	Peak
2	'Mudi' / 'Kunnu' / 'Kuntu' / 'Mala'	Mountain/Hill
3	'Paramudi' / 'Kuntappaara'	Rocky Hill
4	'Kuntinthala'	Hill Top
5	'Thandu'	Ridge
6	'Vara'	Cliff
7	'Koha'	Depression
8	'Pallam'	Saddle
9	'Pallathak'	Valley
10	'Othuk'	Spur
11	'Pural'	Open Rocky Area

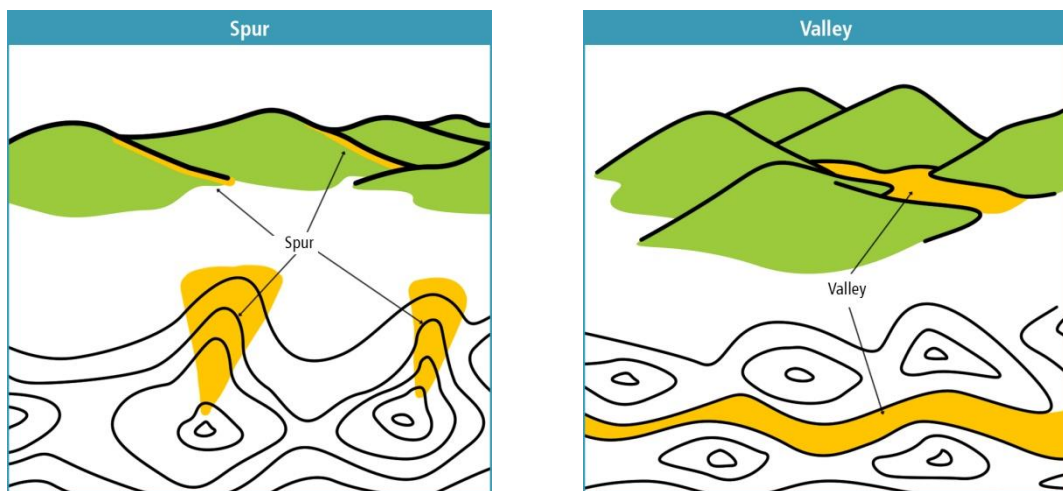


Fig. 4.4 Terrain features: Spur and Valley.

### **4.3.3 Terminologies and ethnoecological knowledge on climate by the *Kadar* and *Malasar* ethnic community**

The Western Ghats region has a tropical climate (Daniel, 2007). The hill tops above 1800m experience mountainous temperate climate, whereas the western slopes in the medium elevation experience wet evergreen climate and lower western slopes are in evergreen climate with the support of the South-West monsoon and North-East monsoon. The eastern slopes experience dry climate due to less availability of the South-West monsoon. The regional climatic condition of the Western Ghats varies according to the altitude and physical vicinity to the equator and Arabian sea. This is well defined as bioclimatic features especially for Anamalai landscape (Bachan, 2010). The Anamalai landscape experience all the unique climatic features of the Western Ghats being accommodated in the highest mountain peaks, the eastern and western slopes, the highest mountain Anamudi peak (2694 m) at the southern edge bordering the high ranges landscape, Many spur hills westward at very low elevations 50m, the dry opening of the Palakkad Gap in the northern boundary and the rain shadow region in the Chinnar valley. The tropical cyclone wind from the Bay of Bengal causes rain in the summer season (Nair and Chandran, 2004). There are four types of climatic conditions in the Anamalai part of the Western Ghats. The southwest monsoon, North-East monsoon, winter, and summer seasons. The *Kadar* indigenous community are distributed more on the wet evergreen part of the central and southern part of Anamalai landscape almost confined to the Chalakudy River Basin. Whereas the *Malasar* community are more exposed to the drier climate near to the Palakkad gap, eastern slopes of the North east part of the Anamalai and few within the Parambikulam Valley.

The *Kadar* ethnic community identified the four seasons with their unique terminologies. The Southwest Monsoon during the period of June to September is called '*Variyakalam*'. During this heavy rainy period also most of the *Kadar* prefers to live in forest

and they collect leafy vegetables (*Adaak*) and tubers (*Thettam*), Edible fungi (*Kumin*) and fishes for food. According to them the onset of South-West monsoon is identified with visibility of large moths seen on the barks of the trees and the cicada sound spread over the forest, inviting the monsoon rain.

North-East monsoon they called '*Kongamaya*' because the wind comes from the Tamil Nadu or Konga Nadu, geologically the Kongu Nadu is an ancient territorial division of Cheras (400 -600 CE) it involves Tamil Nadu (Ramamurthy, 1986; Thangamani, 1982; Menon and Sreedar, 2011). The wind comes from the Kongu Nadu during the second monsoon so they are called '*Kongamaya*'. This is an indication that *Kadars* have a good knowledge of wind directions and climatic formation. This period has strong thunderstorms and wind, and the surrounding vegetation grows fast, very crucial for the forests and to make soil fertile.

The *Kadar* identify the winter season which starts from December and up to February, they termed the season as '*Kulirkkalam*', where the trees foliage and prepare for flowering. This indicates the onset of an important season for collection of Minor Forest Produces from the forest.

The summer season during March to May, called '*Vedakkaalam*', is an ecological indicator of the period, the rivulets and small streams dried and the water level in rivers decreased, the butterflies and moths came to the soil for their food. The forest is completely full of flowers and some of the plants have fruits. It is a good time for wild honey collection because the flowering is almost full. The intermittent rains during the summer are called the rain '*Elevanpoomari*' because of the large *Bombax ceiba* (Indian wild silk cotton) trees flowers and they term the mist formed during this as '*Manjumoottam*'.

The *Malasar* community also has terminologies for the season. They are called '*Malaikkalam*' for both the South-West monsoon and North-East monsoon. During the period of the South-West monsoon, they never catch fishes from dams because of the breeding season. During this period, they collect medicinal plants from the forest for selling to ayurvedic companies. The winter season they call '*Panikaalam*', its Tamil word. Summer season they called '*Vesakkalam*', the honey collection season in the forest.

Table 4.3. Terminologies for Climates by *Kadar* and *Malasar*

Sl. No.	Types of climate	<i>Kadar</i> terminologies	<i>Malasar</i> terminologies
1	South-West Monsoon	' <i>Variyakkalam</i> '	' <i>Malaikkalam</i> '
2	North – east monsoon	' <i>Kongamaya</i> '	' <i>Malaikkalam</i> '
3	Winter	' <i>Kulirkkalam</i> '	' <i>Panikkalam</i> '
4	Summer	' <i>Vedakkalam</i> '	' <i>Vesakkalam</i> '

#### 4.3.4 Terminologies and ethnoecological knowledge on forest types by the *Kadar* and *Malasar* ethnic community

The international definition of forest is the “land covered with trees more than 5 m in height in a minimum 0.5 ha area and not under agriculture and urban practices” ( FAO, 2010). Now, In India, only 24.01% of the country is covered by forest (FSI, 2011). Indian forests have a long geological and evolutionary history which reflects in amazing composition with the Indo-Malayan and Australian species part of the paleotropics with unique paleobotanical value (Sing *et al.*, 2006, 2014; Smith, 1966). The authentic and comprehensive classification of the Indian forests were provided by H .G. Champion, in his great work ‘A preliminary survey of forest types of India and Burma’ (1936) (Sing and Chaturvedi, 2017). He revised the classification of the Indian forests comprehensively in 1968 and categorized it into five major groups based on climatic factors such as temperature,

rainfall and length of the dry season. These include (1) Tropical Forest, (2) Montane subtropical, (3) Montane temperate, (4) Sub- Alpine, (5) Alpine forests and its sixteen sub divisions for India. These five forests are further divided into subgroups and a total of sixteen forest types are present in India (Champion and Seth, 1968). The Western Ghats is has all the moist and dry forest types in India except the desert and some montane vegetation type present in the arid and Himalayan region of the Indian subcontinent.

#### 4.3.4.1 Ethnoecological knowledge on forest types by the *Kadar* ethnic community

The Anamalai landscape has all the unique vegetation types available in the Western Ghats which is the domain of the *Kadar* ethnic community. The *Kadars* are termed the ‘King of Anamalais’ by Thurston (1907). The focus here was to consolidate the indigenous knowledge on various forest types and to look how it correlates with that of the available classification. The *Kadar* identifies six important forest types and five edaphic type or degradation stages as separate vegetation in the Anamalai landscape. All are given below in the table

Table 4.4. Terminologies of Forest types by *Kadar* ethnic community

Sl. No.	<i>Kadar</i> terminologies	Forest types
1	' <i>Peradavi</i> ' / ' <i>Adaavi</i> '	Tropical Wet Evergreen Forest (Rainforest)
2	' <i>Kalakkad</i> '	Semi Evergreen Forest
3	' <i>Veyilkkad</i> '	Degraded Evergreen Forest
4	' <i>Kariyadaavi</i> '	Southern Montane Wet Temperate Forest
5	' <i>Attorathadaavi</i> '	Riparian Forest
6	' <i>Pottelkkad</i> '	Moist Dry Deciduous Forest
7	' <i>Velinkkad</i> '	Dry Deciduous Forest
8	' <i>Chola</i> '	Shola Forest
9	' <i>Pachakkad</i> '	Evergreen Forest
10	' <i>Pathaal/ Vayaal</i> '	Marshy Grasslands
11	' <i>Paadam</i> '	Southern Montane Wet Grasslands

The *Kadar* recognise the Tropical wet evergreen forest or the rainforest as 'Peradaavi'. they identify with the important association of *Mesua ferrea*, *Palaquium ellipticum*, *Pandanus foetidus*, *Strobilanthes spp.*, *Calamus spp.* The tropical evergreen or the west coast evergreen (Champion and Seth, 1968) are called 'Adaavi', which is characterised with *Vateria indica*, *Dipterocarpus indicus*, *Garcinia gummi-gutta* (L.) etc. They recognise the shola forests for 'Chola' which is seen at the top of the high mountains with dominance of *Cinnamomum wightii*, *Actinodaphne bourdillonii*, *Litsea wightiana*, *L. ligustrina*, and *Strobilantus kunthianus* were distributed. The Moist deciduous forest are called 'Pottelkkad' recognised with the presence of *Dillenia pentagyna*, *Terminalia paniculata*, and *Schleichera oleosa* and they differentiate from dry deciduous forest in the eastern slopes of the Anamalai exposed to the deccan plateau is called 'Velinkad' dominated with *Terminalia tomentosa*, *Bamboosa bambos*, *Dendrocalamus strictus* etc.

The *Kadar* have umbilical relationship with the rivers and the riparian forests being a semi nomadic rainforest dwelling community and they recognise that as a forest type and is called 'Attorathadavi'(Riparian Forest) which is dominated with *Humboldtia vahliana*, *Garcinia gummi-gutta*, *Calophyllum calaba*, *Entada rheedei*, *Elaeocarpus tuberculatus*, *Elaeocarpus serratus*, *Capparis moonii*. They recognise Teak plantations as 'Woodthura' for teak plantation and 'Masithura' for tea Plantation based on its origin in the Parambikulam and Valparai regions within the Anamalais.

#### **4.3.4.2 Ethnoecological knowledge on forest types by the *Malasar* ethnic community**

Most of the *Malasar* community live in the dry deciduous forest and a few colonies in the evergreen forest area such as Kachithod and Thekkady villages in the Northern border of Parambikulam valley with Nelliampathi hills and the Pullukkad village in the Nelliampathi. Other villages are distributed in the dry exposed areas of the landscape exposed to the



Palakkad Gap such as Chittoor and Muthalamada, Eruthampathi, Kozhinjapara, Perumatty, Vadakarapathy, Pudukkottai Panchayats in Palakkad district of Kerala. They identified three types of forest such as ‘*Veyilkkad*’, the Dry deciduous forest characterised with *Ziziphus glabrata*, *Terminalia elliptica*, *Terminalia paniculata*, *Getonia floribunda*, *Calotropis gigantea*, *Decalepis hamiltonii*. The ‘*Solakkad*’ for the Shola Forest not considered as their domains and they recognise the Tropical evergreen forest as ‘*Malakkad*’.

Table 4.5. Terminologies of forest types by the *Malasar* ethnic community.

Sl. No.	<i>Malasar</i> terminologies	Forest type
1	' <i>Veyilkkad</i> '	Dry Deciduous Forest
2	' <i>Solakkad</i> '	Shola Forest
3	' <i>Malakkad</i> '	Evergreen Forest
4	' <i>Nallakkad</i> '	Tropical Wet Evergreen Forest or the Rainforest

#### 4.3.5 Knowledge on ecological relationships, functions and theories by the *Kadar* ethnic community.

##### 4.3.5.1 Ecological Relationships

The *Kadar* recognises the substantial relationship between the organism within the forest for food similar to any other indigenous community. They differentiate the relationship as very complex and inclusive as a web of eating and being eaten. The uniqueness of the *Kadar* could be in that they recognise the unique relationship between various organisms within the rainforest habitat.

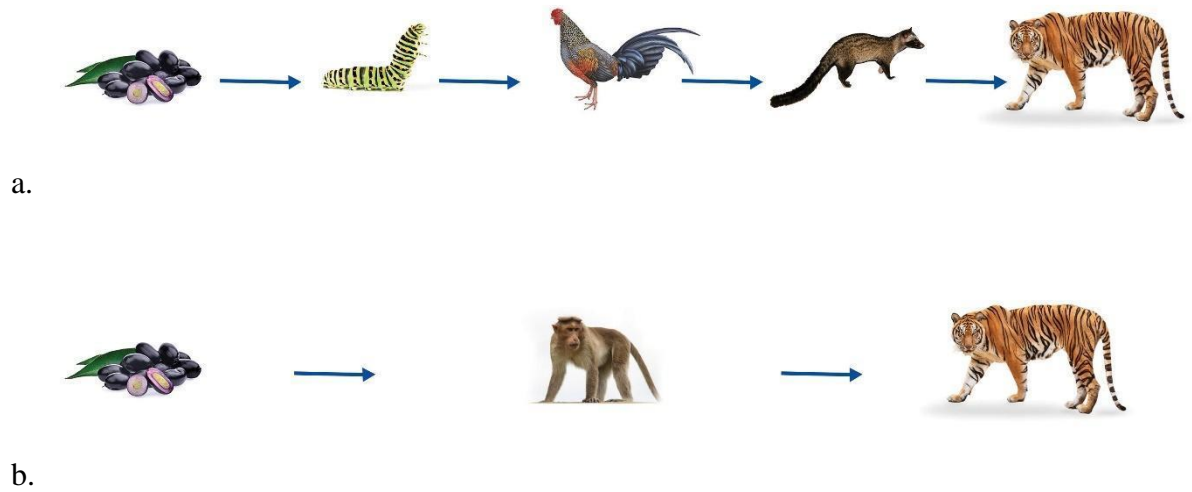


Fig.4.5 Food chain

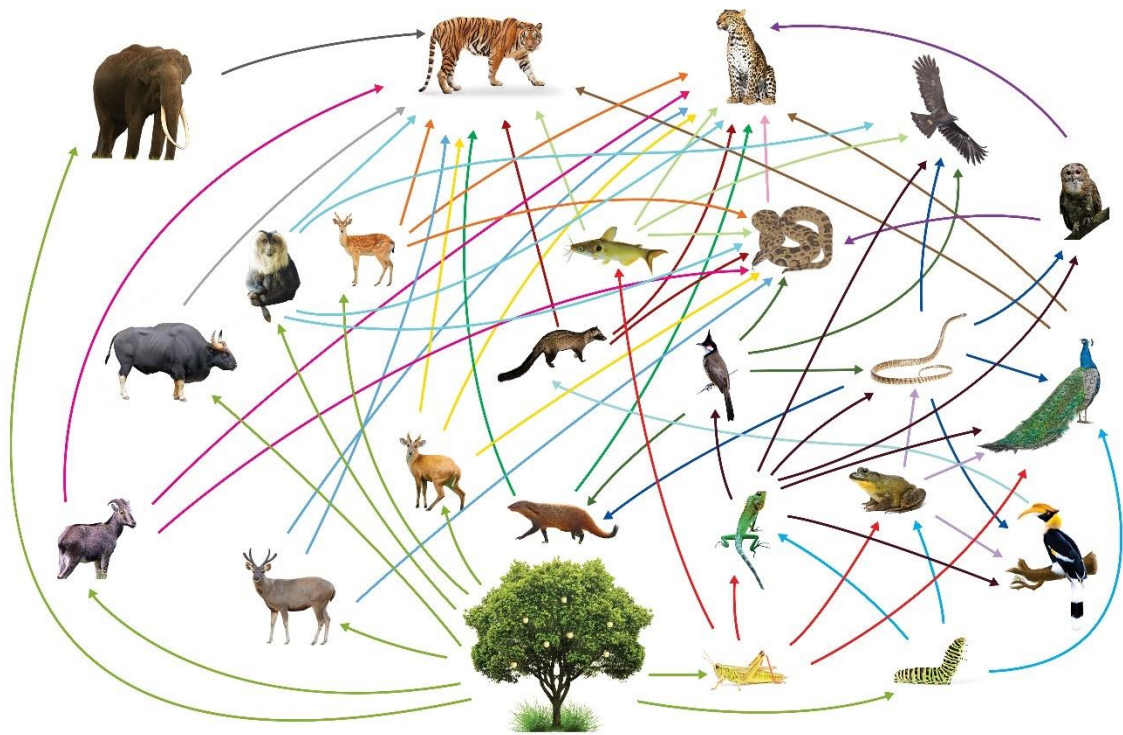


Fig. 4.6 Food web

The *Kadar* believes the creator has given functions to every organism and the nature developed by him as complexity of all these organisms and their relationships. They know the importance of the plants as the producer and other species as the different levels of consumers. They also recognise and respect the important role played by the Wild Dogs and

Tiger as predators. Treating the Tiger as the apex predator and recognising various fauna within the rainforest biome brings uniqueness to their knowledge on this essential relationship of organisms.

The *Kadar* ethnic community recognise different kinds of relationships among organisms other than predation. This can be classified into: i. Mutualism, ii. Commensalism, iii. Competition, iv. Parasitism and v. Migration. These are described below with examples of their knowledge.

The *Malasar* community also recognise the food chains and food web whereas it differs from that of *Kadar* that based on their worldview. This chiefly based on the plants and animals seen in the dry forest areas and degraded grasslands since they live in the comparatively drier north eastern part of Anamalais exposed to the Palakkad Gap and the Deccan plateau.

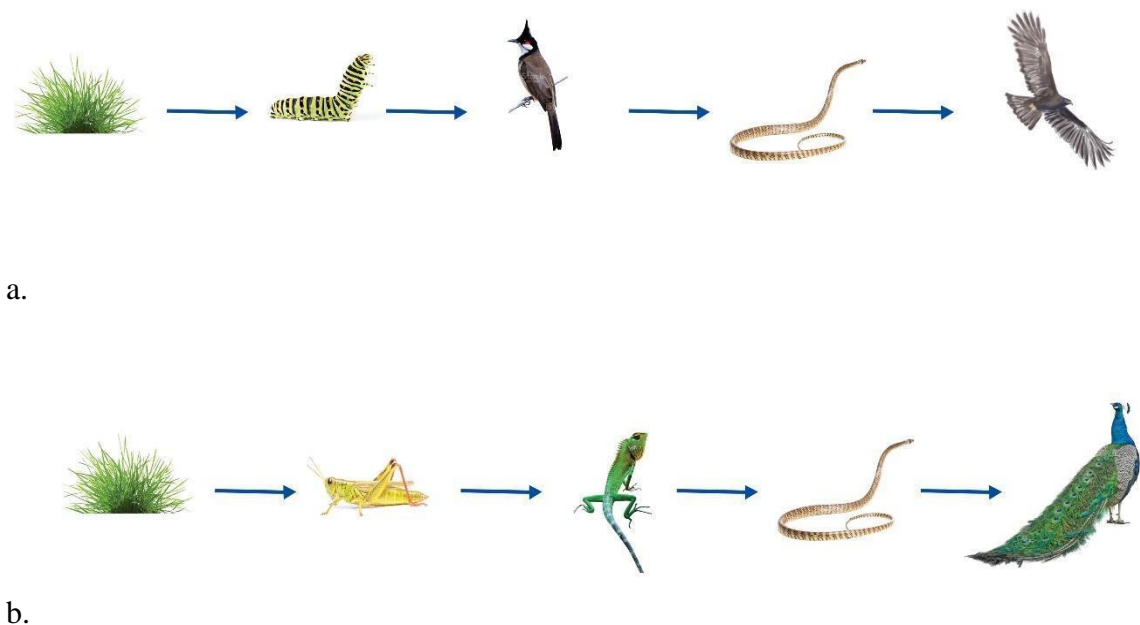


Fig.4.7 Food chain

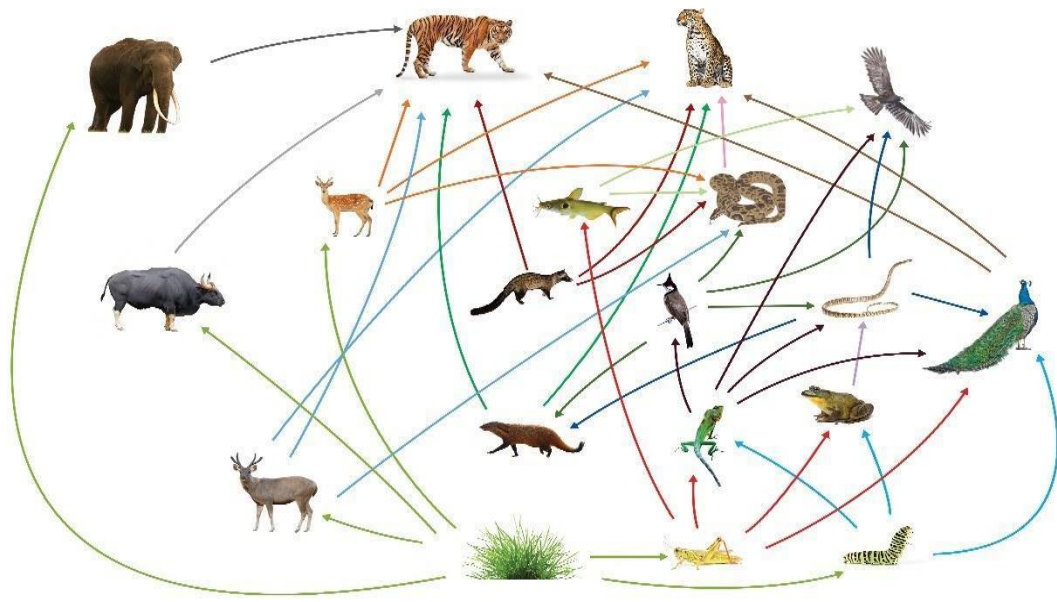


Fig. 4.8 Food web

The inclusion of peacock, eagle, spotted deer and excluding some animals of the rainforest gives the differences.

#### 4.3.5.1.1 Mutualism

Mutualism is an interaction between species where both the species are equally benefited. The *Kadar* recognise the following relationships as mutualism.

1. Honey bees and flowering plants: The *Kadar* believes creators give responsibility to bees for pollination of flowering plants and they get honey for their service.
2. '*Kakral*' (Myna) and '*Poth*' (Wild gour): The bird eats the tick on the wild Gour.
3. *Kadar* and dog: The *Kadar* ethnic community recognise their relationship with the dogs they are rearing as mutualistic and consider them as part of their life and don't consider as slave.

4. '*Chochoppa*' and Tiger in forest: According to them a bird named '*Chochoppa*' and the Tiger have a relation. The bird gives a signal to the tiger when the prey is near. The bird gets a share and they eat decayed flesh and worms on the kill when the hunt is over.
5. '*Muthiyarukili*' (Malabar whistling thrush) and *Kadar*: They call the Malabar whistling thrush as '*Muthiyarukili*' meaning the 'elder's bird' and consider it as their ancestors. The *Kadar* doesn't disturb the bird and its habitat. The bird gives signals to *Kadars* when any kind of dangerous situation is in front of them like a tiger, elephants, or snakes near to their path.
6. Signalling birds and animals move in groups or bird flocks: Give signals to other faunal groups for their protection.
7. Giant squirrel, languor gives alert to other animals and birds: Giant squirrel, languor gives alert to others when predators or hunters are near and they are also safe when moving in groups.
8. '*Kilipada*' (flock of bird) and drongo: The *Kadar* identify the flocks of birds of different species moving together as feeding groups when some plants have gregarious flowering or fruiting or even in the morning and evening to catch insects or termites fly out with summer rains. The drongos are the benefited birds which feed on insects and flies with the bird flocks when they move together and they keep the vigilance and signals when the predators are there.

#### **4.3.5.1.2 Commensalism**

In relationships between two species, one is benefited and the other one has neither benefited nor harmed.

1. '*Marappana*' (orchid family members and some pteridophytes) and trees: The plants live in the host plant without damaging the host.

2. Trees and birds, bees, animals for nesting: The birds, bees, and some animals live in the tree without damaging the host.

#### **4.3.5.1.3 Competition and Coexistence**

The *Kadars* identify competition chiefly for food and territory. But at the same time, they recognise most of the time where there is no competition, because they compete by two species for the same resource in identical geographical areas. Important one among these is the territory behaviour of the carnivores, especially of the tiger.

Another could be among monkeys. According to the *Kadar* the competition among monkeys within the herds are controlled with the chief when they got out of control and that between different herds rarely outbreak as conflict and most of the cases, they follow manners without intruding to others territory. They also observe that the different species of organism show exceptional behaviours of co-action and co-existence even though they depend on the same habitat or vegetation. They observe that among the elephants, wild gour, sambar and langurs move together in the forest and grazing grounds. The competition is chiefly between individuals for protection of mating rather than among different groups. They also observe Great Hornbills, Lion Tailed Macaques and Giant squirrels feeding together on black plum trees in summer.

#### **4.3.5.1.4 Parasitism**

The *Kadar* observe that certain plants especially emerging from the ground are dependent on certain plants, roots or remnants. Some leafless flowers come out from the forest floor such as species of Orobanchaceae as parasites. They observe epiphytic plants of the Loranthaceae as damaging the host trees and clearly differentiate that from the epiphytes. They also have the appearance of fungi *Termitomyces* as such a parasitic relationship on the host of remnants of the dead plants and termite mounds.



#### 4.3.5.1.5 Migration

The migration is the normal and important factor determining the population interactions and ecological succession in Ecology. The *Kadar* ethnic community also recognise the migration behaviours of plants and animals. The most significant one could be the migration of the freshwater fishes especially the ‘*Choor*a’ (Masheer) to upstreams of the river along waterfalls. They also know the behaviour of elephant herds to migrate from south to north and reverse in different seasons in an annual cycle in the Western Ghats. They identify the wagtails as ‘*Kattangadali*’ and recognise the appearance of Forest Wagtail as a result of migration. They also recognise local migration of the birds and animals. In the case of Great Hornbills they do flock and migrate from one valley to another after the nesting season. They also recognise the invasive plants as result of migration from some other regions.

#### 4.3.5.2 Ecological Functions

##### 4.3.5.2.1 Seed dispersal

Seed dispersal is one of the important ecological interactions between higher plants and animals apart from the pollination. The *Kadar* community knows it as an essential relationship which enables the movement of plants from one place to another. During the study, the seed dispersal agents and patterns of 127 plant species were identified from the *Kadar* which are known to them.

Table 4.6. Seed dispersal

Sl. No.	Scientific Name	Family	Seed dispersal
1	<i>Achyranthes aspera</i> L.	Amaranthaceae	Seed dispersed through animals and human.

2	<i>Achyranthes aspera</i> var. <i>porphyristachya</i> (Wall. ex Moq.) Hook. f.	Amaranthaceae	Seed dispersed through animals and human.
3	<i>Achyranthes aspera</i> var. <i>pubescens</i> (Moq.) M. Gómez	Amaranthaceae	Seed dispersed through animals and human.
4	<i>Holigarna arnottiana</i> Wall. ex Hook. f.	Anacardiaceae	Seeds are dispersed through animals and birds
5	<i>Holigarna beddomei</i> Hook.f.	Anacardiaceae	Seeds are dispersed through animals and birds
6	<i>Holigarna ferruginea</i> Marchand	Anacardiaceae	Seeds are dispersed through animals and birds
7	<i>Holigrana grahamii</i> (Wight) Kurz.	Anacardiaceae	Seeds are dispersed through animals and birds
8	<i>Mangifera indica</i> L.	Anacardiaceae	Seeds are dispersed through human, animals and hornbills
9	<i>Semecarpus travancoricus</i> Bedd.	Anacardiaceae	Seeds are dispersed through animals and birds
10	<i>Solenocarpus indica</i> Wight & Arn.	Anacardiaceae	Seeds are dispersed through Monkeys and birds
11	<i>Spondias pinnata</i> (L. f.) Kurz.	Anacardiaceae	Seeds are dispersed through Monkeys and birds
12	<i>Monoon coffeoides</i> (Thwaites ex Hook. f. & Thomson) B. Xue & R. M. K. Saunders	Annonaceae	Seeds are dispersed through Monkeys and birds
13	<i>Peucedanum anamallayense</i> C. B. Clarke	Apiaceae	Through wind
14	<i>Decalepis hamiltonii</i> Wight & Arn.	Apocynaceae	Through wind
15	<i>Hemidesmus indicus</i> (L.) R. Br.	Apocynaceae	Through wind

16	<i>Holarrhena pubescens</i> Wall. ex G. Don	Apocynaceae	Through wind
17	<i>Pergularia daemia</i> (Forssk.) Chiov.	Apocynaceae	Through wind
18	<i>Wrightia arborea</i> (Dennst.) Mabb.	Apocynaceae	Through wind
19	<i>Wrightia tinctoria</i> (Roxb.) R. Br.	Apocynaceae	Through wind
20	<i>Areca catechu</i> L.	Arecaceae	Seed dispersal through bats
21	<i>Calamus hookerianus</i> Becc.	Arecaceae	Seeds are dispersed through human, monkeys and birds
22	<i>Calamus thwaitesii</i> Becc.	Arecaceae	Seeds are dispersed through human, monkeys and birds
23	<i>Caryota urens</i> L.	Arecaceae	Seed dispersed through civets
24	<i>Ageratum conyzoides</i> L.	Asteraceae	Through wind
25	<i>Chromolaena odorata</i> (L.) R. M. King & H. Rob.	Asteraceae	Through wind
26	<i>Strobocalyx arborea</i> (Buch.-Ham.) Sch. Bip.	Asteraceae	Through wind
27	<i>Cyanthillium cinereum</i> (L.) H. Rob.	Asteraceae	Through wind
28	<i>Canarium strictum</i> Roxb.	Burseraceae	Seed dispersed through hornbills
29	<i>Carica papaya</i> L	Caricaceae	Seed dispersed through birds and human
30	<i>Garcinia gummi-gutta</i> (L.)	Clusiaceae	Seed dispersed through human, Elephants
31	<i>Eleusine coracana</i> (L.) Gaertn.	Cyperaceae	Seed dispersed through birds and human
32	<i>Elaeocarpus munroii</i> (Wight) Mast.	Elaeocarpaceae	Seed dispersed through birds, rats and squirrels

33	<i>Elaeocarpus serratus</i> L.	Elaeocarpaceae	Seed dispersed through birds, rats and squirrels
34	<i>Elaeocarpus tuberculatus</i> Roxb.	Elaeocarpaceae	Seed dispersed through rats and squirrels
35	<i>Elaeocarpus variabilis</i> Zmarzty	Elaeocarpaceae	Seed dispersed through birds, rats and squirrels
36	<i>Senegalia caesia</i> (L.) Maslin, Seigler & Ebinger	Fabaceae	Through wind
37	<i>Senegalia rugata</i> (Lam.) Britton & Rose	Fabaceae	Through wind
38	<i>Senegalia torta</i> (Roxb.) Maslin, Seigler & Ebinger	Fabaceae	Through wind
39	<i>Pterocarpus marsupium</i> Roxb.	Fabaceae	Through wind
40	<i>Actinodaphne bourdillonii</i> Gamble	Lauraceae	Seed dispersed through birds
41	<i>Actinodaphne tadulingamii</i> Gamble	Lauraceae	Seed dispersed through birds
42	<i>Actinodaphne wightiana</i> (Kuntze) Noltie	Lauraceae	Seed dispersed through birds
43	<i>Alseodaphne semecarpifolia</i> Nees	Lauraceae	Seed dispersed through birds
44	<i>Beilschmiedia gemmiflora</i> (Blume) Kosterm	Lauraceae	Seed dispersed through birds
45	<i>Cinnamomum bejolghota</i> (Buch.-Ham.) Sweet	Lauraceae	Seed dispersed through birds
46	<i>Cinnamomum camphora</i> (L.) J. Presl.	Lauraceae	Seed dispersed through birds
47	<i>Cinnamomum sulphuratum</i> Nees	Lauraceae	Seed dispersed through birds
48	<i>Litsea beddomei</i> Hook. f.	Lauraceae	Seed dispersed through birds
49	<i>Litsea coriacea</i> (B. Heyne ex Nees) Hook. f.	Lauraceae	Seed dispersed through birds

50	<i>Litsea floribunda</i> (Blume) Gamble	Lauraceae	Seed dispersed through birds
51	<i>Litsea stocksii</i> Hook. fil.	Lauraceae	Seed dispersed through birds
52	<i>Neolitsea cassia</i> (L.) Kosterm.	Lauraceae	Seed dispersed through birds
53	<i>Neolitsea pallens</i> (D. Don) Momiy. & H. Hara	Lauraceae	Seed dispersed through birds
54	<i>Machilus glaucescens</i> (Nees) Wight	Lauraceae	Seed dispersed through birds
55	<i>Phoebe lanceolata</i> (Nees) Nees	Lauraceae	Seed dispersed through birds
56	<i>Bombax ceiba</i> L.	Malvaceae	Through wind
57	<i>Bombax insigne</i> Wall.	Malvaceae	Through wind
58	<i>Cieba pentandra</i> (L.) Gaertn.	Malvaceae	Through wind
59	<i>Cullenia exarillata</i> A. Robyns	Malvaceae	Through wind
60	<i>Aglaia edulis</i> (Roxb.) Wall.	Meliaceae	Seed dispersed through birds
61	<i>Aglaia elaeagnoidea</i> (A. Juss.) Benth.	Meliaceae	Seed dispersed through birds
62	<i>Aglaia lawii</i> (Wight)	Meliaceae	Seed dispersed through birds
63	<i>Azadirachta indica</i> A. Juss.,	Meliaceae	Seed dispersed through birds
64	<i>Chukrasia tabularis</i> A. Juss.	Meliaceae	Seed dispersed through birds
65	<i>Dysoxylum malabaricum</i> Bedd. ex Hiern	Meliaceae	Seed dispersed through birds
66	<i>Reinwardtiidendron anamalaiense</i> (Bedd.) D. J. Mabberley	Meliaceae	Seed dispersed through birds
67	<i>Toona ciliata</i> M. Roem.	Meliaceae	Seed dispersed through birds
68	<i>Artocarpus gomezianus</i> subsp. <i>zeylanicus</i> Jarrett	Moraceae	Seed dispersed through birds, monkeys and squirrels
69	<i>Artocarpus heterophyllus</i> Lam.	Moraceae	Seed dispersed through birds, monkeys and squirrels

70	<i>Artocarpus hirsutus</i> Lam.	Moraceae	Seed dispersed through birds, monkeys and squirrels
71	<i>Artocarpus altilis</i> (Parkinson) Fosberg	Moraceae	Seed dispersed through birds, monkeys and squirrels
72	<i>Ficus amplissima</i> J. E. Smith	Moraceae	Seed dispersed through birds, monkeys and squirrels
73	<i>Ficus anamalayana</i> Sudhakar	Moraceae	Seed dispersed through birds, monkeys and squirrels
74	<i>Ficus arnottiana</i> (Miq.) Miq.	Moraceae	Seed dispersed through birds, monkeys and squirrels
75	<i>Ficus beddomei</i> King	Moraceae	Seed dispersed through birds, monkeys and squirrels
76	<i>Ficus benghalensis</i> L.	Moraceae	Seed dispersed through birds, monkeys and squirrels
77	<i>Ficus callosa</i> Willd.	Moraceae	Seed dispersed through birds, monkeys and squirrels
78	<i>Ficus costata</i> Aiton	Moraceae	Seed dispersed through birds, monkeys and squirrels
79	<i>Ficus dalhousiae</i> (Miq.) Miq.	Moraceae	Seed dispersed through birds, monkeys and squirrels
80	<i>Ficus drupacea</i> Thunb.	Moraceae	Seed dispersed through birds, monkeys and squirrels
81	<i>Ficus exasperate</i> Vahl	Moraceae	Seed dispersed through birds, monkeys and squirrels
82	<i>Ficus heterophilla</i> L. f.	Moraceae	Seed dispersed through birds, monkeys and squirrels
83	<i>Ficus hispida</i> L. f.	Moraceae	Seed dispersed through birds, monkeys and squirrels



84	<i>Ficus microcarpa</i> L. f.	Moraceae	Seed dispersed through birds, monkeys and squirrels
85	<i>Ficus mollis</i> Vahl	Moraceae	Seed dispersed through birds, monkeys and squirrels
86	<i>Ficus nervosa</i> Roth	Moraceae	Seed dispersed through birds, monkeys and squirrels
87	<i>Ficus racemosa</i> L.	Moraceae	Seed dispersed through birds, monkeys and squirrels
88	<i>Ficus religiosa</i> L.	Moraceae	Seed dispersed through birds, monkeys and squirrels
89	<i>Ficus travancorica</i> King	Moraceae	Seed dispersed through birds, monkeys and squirrels
90	<i>Ficus superba</i> Miq.	Moraceae	Seed dispersed through birds, monkeys and squirrels
91	<i>Ficus talbotii</i> King	Moraceae	Seed dispersed through birds, monkeys and squirrels
92	<i>Ficus tinctoria</i> G. Forst	Moraceae	Seed dispersed through birds, monkeys and squirrels
93	<i>Ficus tsjahela</i> Burm. f.	Moraceae	Seed dispersed through birds, monkeys and squirrels
94	<i>Moringa concanensis</i> Nimmo	Moringaceae	Seed dispersed through wind
95	<i>Ensete superbum</i> (Roxb.) Cheesman	Musaceae	Seed dispersed through birds, monkeys, civets, rats, and squirrels
96	<i>Myristica malabarica</i> Lam.	Myristicaceae	Seed dispersed through hornbills and other birds
97	<i>Knema attenuata</i> (Hook. fil. & Thoms.) Warb.	Myristicaceae	Seed dispersed through hornbills and other birds

98	<i>Myristica beddomei</i> King	Myristicaceae	Seed dispersed through hornbills and other birds
99	<i>Gymnacranthera canarica</i> (Bedd. ex King) Warb.	Myristicaceae	Seed dispersed through hornbills and other birds
100	<i>Psidium guajava</i> L.	Myrtaceae	Seed dispersed through birds, monkeys, civets, rats, and squirrels
101	<i>Syzygium aqueum</i> (Burm.f.) Alston	Myrtaceae	Seed dispersed through birds, monkeys, civets, rats, and squirrels
102	<i>Syzygium caryophyllatum</i> (L.) Alston	Myrtaceae	Seed dispersed through birds, monkeys, civets, rats, and squirrels
103	<i>Syzygium cumini</i> (L.) Skeels.	Myrtaceae	Seed dispersed through birds, monkeys, civets, rats, and squirrels
104	<i>Syzygium gardneri</i> Thwaites	Myrtaceae	Seed dispersed through birds, monkeys, civets, rats, and squirrels
105	<i>Syzygium grande</i> (Wight) Walp.	Myrtaceae	Seed dispersed through birds, monkeys, civets, rats, and squirrels
106	<i>Syzygium laetum</i> (Buch - Ham)	Myrtaceae	Seed dispersed through birds, monkeys, civets, rats, and squirrels
107	<i>Syzygium lanceolatum</i> (Lam.) Wt. & Arn.	Myrtaceae	Seed dispersed through birds, monkeys, civets, rats, and squirrels
108	<i>Syzygium mundagam</i> (Bourd.) Chitra	Myrtaceae	Seed dispersed through birds, monkeys, civets, rats, and squirrels

109	<i>Syzygium munronii</i> (Wt.) Chandrab.	Myrtaceae	Seed dispersed through birds, monkeys, civets, rats, and squirrels
110	<i>Aporosa acuminata</i> Thwaites	Phyllanthaceae	Seed dispersed through birds
111	<i>Aporosa cardiosperma</i> (Gaertn.) Merr.	Phyllanthaceae	Seed dispersed through birds
112	<i>Baccaurea courtallensis</i> (Wight) Müll. Arg.	Phyllanthaceae	Seed dispersed through birds, Cochine cane turtle, elephants, civets, deers and monkeys
113	<i>Ziziphus oenoplia</i> (L.) Miller	Rhamnaceae	Seed dispersed through birds
114	<i>Ziziphus rugosa</i> Lam.	Rhamnaceae	Seed dispersed through birds
115	<i>Flacourtia jangomas</i> (Lour.) Raeusch	Salicaceae	Seed dispersed through birds and squirrels
116	<i>Flacourtia montana</i> J. Graham	Salicaceae	Seed dispersed through birds and squirrels
117	<i>Chrysophyllum roxburghii</i> G. Don	Sapotaceae	Seed dispersed through birds, monkeys, civets, rats, and squirrels
118	<i>Isonandra perrottetiana</i> A. DC.	Sapotaceae	Seed dispersed through birds, monkeys, civets, rats, and squirrels
119	<i>Madhuca neriifolia</i> (Moon) H. J. Lam	Sapotaceae	Seed dispersed through birds, monkeys, civets, rats, and squirrels
120	<i>Mimusops elengi</i> L.	Sapotaceae	Seed dispersed through birds, monkeys, civets, rats, and squirrels
121	<i>Palaquium ellipticum</i> (Dalzell) Baill.	Sapotaceae	Seed dispersed through birds, monkeys, civets, rats, and squirrels

122	<i>Palaquium ravii</i> Sasidh. & Vink	Sapotaceae	Seed dispersed through birds, monkeys, civets, rats, and squirrels
123	<i>Holoptelea integrifolia</i> Planch.	Ulmaceae	Through wind
124	<i>Lantana camara</i> L.	Verbenaceae	Through birds
125	<i>Ampelocissus latifolia</i> (Roxb.) Planch.	Vitaceae	Through birds
126	<i>Leea asiatica</i> (L.) Ridsdale	Vitaceae	Through birds
127	<i>Leea indica</i> (Burm. f.) Merr.	Vitaceae	Through birds

#### 4.3.5.2.2 Phenology

The *Kadar* community regularly observe the phenology of plants as reflection of the seasons and also as indication of onset of seen. Many of the MFP collections are seasonal and have direct relationships with the forest phenology. They have given a list species that indicate the onset of seasons in relation with plant phenology and are provided here.

Table 4.7. Phenology of plants

Sl.No	Scientific name	Family	Phenology
1	<i>Dicliptera cuneata</i> Nees.	Acanthaceae	Flowering in ' <i>Kulirkaalam</i> ' (Winter season).
2	<i>Ecbolium viride</i> (Forssk.) Alston	Acanthaceae	Flowering in ' <i>Kulirkaalam</i> ' (Winter season).
3	<i>Hydnocarpus alpine</i> Wight	Achariaceae	Flowering & fruiting in ' <i>Vedakkalam</i> ' (summer season.)
4	<i>Hydnocarpus macrocarpa</i> (Bedd.) Warb.	Achariaceae	Flowering & fruiting in ' <i>Vedakkalam</i> ' (summer season.)

5	<i>Hydnocarpus pentandrus</i> (Buch.-Ham.) Oken	Achariaceae	Flowering & fruiting in 'Vedakkalam' (summer season.)
6	<i>Achyranthes aspera</i> L.	Amaranthaceae	Flowering and fruiting in 'Kulirkaalam' (Winter season).
7	<i>Achyranthes aspera</i> var. <i>pubescens</i> (Moq.) M.Gómez	Amaranthaceae	Flowering and fruiting in 'Kulirkaalam' (Winter season).
8	<i>Achyranthes aspera</i> var. <i>porphyristachya</i> (Wall. ex Moq.)	Amaranthaceae	Flowering and fruiting in 'Kulirkaalam' (Winter season).
9	<i>Alstonia scholaris</i> (L.) R.Br.	Apocynaceae	Flowering is before honey season ( February - March)
10	<i>Strobocalyx arborea</i> (Buch.-Ham.) Sch. Bip.	Asteraceae	Flowering in February- March, before the honey season.
11	<i>Garcinia gummi-gutta</i> (L.)	Clusiaceae	Flowering and fruiting in 'variyaalam' (Monsoon season)
12	<i>Getonia floribunda</i> Roxb.	Combretaceae	Flowering in 'Vedakkalam' (summer season)
13	<i>Terminalia bellirica</i> (Gaertn.) Roxb.	Combretaceae	Flowering in 'Vedakkalam' (summer season)
14	<i>Terminalia chebula</i> Retz.	Combretaceae	Flowering in 'Vedakkalam' (summer season)
15	<i>Terminalia elliptica</i> Willd.	Combretaceae	Flowering in 'Vedakkalam' (summer season)
16	<i>Terminalia paniculata</i> Roth.	Combretaceae	Flowering in 'Vedakkalam' (summer season)

17	<i>Vateria indica</i> L.	Dipterocarpaceae	Flowering in honey season (March -August).
18	<i>Cassia fistula</i> L.	Fabaceae	Flowering in 'Vedakkalam' (summer season.)
19	<i>Bombax ceiba</i> L.	Malvaceae	Flowering in 'Vedakkalam' (summer season.)
20	<i>Cullenia exarillata</i> A. Robyns	Malvaceae	Flowering in 'Kulirkaalam' (Winter season) and fruiting in 'variyaalam', 'Kongamalakaalam' (monsoon season)
21	<i>Piper umbellatum</i> L.	Piperaceae	Flowering in 'variyaalam', 'Kongamalakaalam' (monsoon season)
22	<i>Piper barberi</i> Gamble.	Piperaceae	flowerin in honey seacon
23	<i>Piper betle</i> L.	Piperaceae	
24	<i>Piper longum</i> L.	Piperaceae	Flowering in 'variyaalam', 'Kongamalakaalam' (monsoon season)
25	<i>Piper peepuloides</i> Roxb.	Piperaceae	flowerin in honey seacon



26	<i>Piper nigrum</i> L.	Piperaceae	Flowering in ' <i>variyaakaalam</i> ', ' <i>Kongamalakaalam</i> '( monsoon season)
27	<i>Bambusa bambos</i> (L.) Voss	Poaceae	Once in a life time
28	<i>Dendrocalamus strictus</i> (Roxb.) Nees	Poaceae	Once in a life time

#### 4.3.5.2.3 The autecological and synecological knowledge of *Kadar*

The most of the ecological knowledge the *Kadar* have is in relation with one another, either that of species with terrain, climate or with another species. They observe and differentiate it as the relationship of a species along with the breeding biology and life cycle and hence could be termed as Autecological. Similarly they elucidate the interactions of populations or communities and they function together in response to the changes in nature leading to processes such as 'Ecological succession' or 'Development of ecosystems'. Most of these observations are told as experiences of individuals to others in the community especially when they are in the forests and are consolidated with repeated events as stories or myths and transferred from one generation to another. Most of these stories when put into the particular context have great values. Some examples on autecological observations of the *Kadar* apart from that explained in detail in the above chapters are provided below. These include many of the threatened species including Tiger, Elephant etc and the unique ones could be of the Purple frog they call '*Thattukottan*', King Cobra and Great hornbills.

##### 4.3.5.2.3.1 Hornbills

The *Kadars* recognise and name three types of hornbills seen in South India i.e. Great Hornbill ('*Onkal*'), Malabar Pied Hornbill ('*Vattiyonkal*'), and Malabar Grey Hornbill

(*Cherattan*). According to Bachan *et al.*, (2019), the Great Hornbills are generally called '*Malamuzhakki*' by the indigenous communities in Kerala and '*Iruvachi*' in Tamil. The name given by *Kadar* for Great Hornbill '*Onkal*' could be unique. The Malabar Pied Hornbills are distributed along the low elevation riparian forest in Kerala at two locations the Vazhachal part in the Anamalais and at the Aralam wildlife sanctuary area, the *Kadar* recognise their nesting habitat, breeding biology and are termed as '*Vattionkal*' meaning hornbills smaller than that of the Great hornbill and the nomenclature is unique (Bachan *et al.*, 2011, 2019). The studies on the hornbills and their habitat also the conservation program involving *Kadar* indigenous community progressed (Prabhu *et al.*, 2005, Bachan, 2006, Bachan *et al.*, 2011, 2019) with the autecological knowledge of *Kadar* on the Hornbills. They identify hornbills as monogamous birds living in the natural hollows of large trees. The *Kadar* consider hornbills as kings of the forest birds since they don't have enemies except for humans. Bachan *et al.*, (2014) narrated a story between the great hornbill and the turtle indicating hornbill as an apex and generous species doing favour to others as described by the *Kadar* indigenous community. The *Kadar* recognise the important role of hornbills for their service for seed dispersal for many rainforest trees such as figs, black dammar, wild nutmeg etc. Manikkaraj, a member of the *Kadar* community, describes the specific role of the Great Hornbill in the seed dispersal of such rainforest trees in the documentary '*Fragile world of Great Hornbills*' (Bachan, 2007). Later this has been elaborated as research observations and recognised the role of hornbills in dispersal of nearly 150 species of trees of the wet evergreen forests (Bachan *et al.*, 2019).

The *Kadar* indigenous community know that the hornbills nest in same nesting holes of the large nesting trees. This is how they used to hunt the squabs traditionally when they don't have much food availability in the summer season. This could not be termed as hunting is basically a collection of the mother and chicks from the hollow for meat. They believe the

male shall find a new mate for the next season and this was not frequent. The collection of hornbill squabs was at average 2-3 nests in 400 sq km of forest per year traditionally and was reduced to one nest in 10 years recently with the conservation program (Bachan, 2019). They observe cannibalism in hornbills where they feed on dead chicks to feed the other chicks in the nest and believe that the chick is sacrificed for the longevity of the nesting tree because the habitat is degrading. The studies observe (Kannan 1997, Bachan *et al.*, 2011, 2019) that the clutch size success of Great hornbills have a direct relationship with availability of fruiting trees and hence on the health of the forest. *Kadar* used to collect seeds of rare plants from the nest made of Great Hornbills.



Fig. 4.9 Great Hornbill (*Buceros bicornis*)

#### 4.3.5.2.3.2 King cobra

The *Kadar*, named the largest and most venomous snake in South Asia, the King Cobra as '*Kootupambu*' indicating the nest-making behaviours of this snake. The snake inhabits wetlands, bamboo, and bamboo reed forests, open areas of the forest. They are frequently seen in wet areas of forest. The snake makes its nest with dry leaves with the help

of a gummy discharge of body fluid. Females are making the nest for brooding. Kadar community mostly sees nests of snakes in the summer season. According to *Kadar* they are not aggressive in general but during the incubation period both the male and female take care of the nest. The *Kadar* community believe that the King cobra (*Ophiophagus hannah*) is at the apex of the snakes where they eat mostly other snakes.



Fig. 4.10 King Cobra (*Ophiophagus hannah*)

#### 4.3.5.2.3.3 Purple Frog

The Purple Frog or the Indian Purple Frog *Nasikabatrachus sahyadrensis* endemic to the Southern Western Ghats was first described only in 2003 (Biju and Bossuyt, 2003). They are usually subterranean and only come out during the monsoon for breeding. The *Kadar* indigenous community has a good knowledge of the specie. They know its behaviour and the vocal notes. They named the Indian Purple Frog as '*Thattukottan*' or '*Kottan*' based on that.

According to *Kadar* they breed near small streams and rocky areas of the river during monsoon season and go to sleep under the soil and the *Kadar* traditionally consider them as a medicine for asthma.



Fig. 4.11 Purple Frog (*Nasikabatrachus sahyadrensis*)

#### 4.3.5.2.3.4 Lion-Tailed Macaque

The Lion-Tailed Macaque (*Macaca silenus*) threatened and endemic arboreal monkey seen in the rainforests of the Western Ghats. The *Kadar* have knowledge of their behaviour, breeding biology, and ecological role. The community identify the relationship between Lion-Tailed Macaque and the large forest trees such as '*Pali*' (*Palaquium ellipticum*), '*Karani*' (*Cullenia exarillata*) for food and seed dispersal. The expertise of the Lion-Tailed Macaque as an arboreal monkey and their behaviours are narrated as stories. The troops of Lion-Tailed Macaque are led by a leader or the chief. Sometimes they threaten the *Kadar* when they are alone in the forest in search of Honey demanding for a share. The *Kadar* consider the Lion-Tailed Macaque different from the Nilgiri Langurs in the diet as omnivores sometimes hunt small animals. The *Kadar* imitates the sounds of monkeys and consider as companions in the '*Adavi*' good evergreen forests.

#### **4.3.5.2.3.5 Asian Elephant**

The *Kadars* describe the elephants as their ancestors and protectors of the forest through wandering around all the landscapes. They believe that the elephant is evolved from a *Kadar* woman. It is told as a myth that ‘A pregnant *Kadar* woman and her husband were living alone in the forest. The husband went to '*Kadarippan*' for collection of the MFPs from forest and lost his way for days. As she was alone and starving she took mortar and joined with her legs, and the club was joined in front of her body, winnowing basket covered her face and mat covered her body. She transformed into an unusual very vigilant animal, an elephant. The mortar became the fatty legs of the elephant, the club the trunk, the winnowing basket to large ears. *Kadar* believes elephants don't attack the *Kadar* community and they have good communication with elephants compared to any other human.

#### **4.3.5.2.3.6 Malabar Giant Squirrel**

The *Kadar* consider Malabar Giant squirrels as the messengers in the forest. They give signals to others in the forest when the human or any predators are there. The *Kadar* named them as ‘*Venka*’ because of the beautiful colour pattern. The community is well versed with the behavioural ecology and breeding biology of the Malabar Giant Squirrel. According to *Kadar*, a pair of Malabar Giant Squirrels make seven nests in nearby trees of different heights at a time and shift the babies from one nest to another as a strategy to save them from predators.

#### **4.3.5.2.3.7 Tiger**

The *Kadar* community consider the Tiger also as one of their ancestors wandering alone in the forest and protecting. The *Kadar* have a belief that they need to obey certain rules and practices when they are in forests. If anyone miscreants in their society, the tiger or elephants can attack. The *Kadar* believe that the hunting by the Tiger is a necessary event to balance the ecosystems.



### **4.3.5.3 Ecological Theories**

#### **4.3.5.3.1 Synecological Indigenous Knowledge: Ecological Succession and Ecological Niche**

The *Kadar* community clearly knows the development of the ecosystem happening with the interaction of different species and according to them every species plays a crucial role in the ecosystem development. They differentiate the secondary succession from primary succession and the reasons for leading to the secondary succession. They also understand the Niche of each species and they believe the species and their populations exist together with certain rules to respect others territory (Physical niche) and duties and rights (functional niche) as decided by the Forest.

##### **4.3.5.3.1.1 Succession**

The *Kadar* community identifies two seral communities of succession. They are ‘*Vegari*’ and ‘*Kale*’. ‘*Vegari*’ is the pioneer community. In this stage; grasses, *Mimosa pudica*, and *Solanum virginianum* will grow in the dry areas of the forest, and pteridophytes (‘*Thaaka*’), grasses, and other creepers will grow in the wet areas of the forest. The pioneer community moisturizes the soil and improves its fertility. Then the ‘*Paana chedi*’ (*Glycosmis pentaphylla*) does spread over the area. This stage is called ‘*Kale*’. *Glycosmis pentaphylla* is a seral community dominated in that area. Its fruits will attract the birds and bears which bring seeds of other seral species through their droppings and scats. According to *Kadar*, this is the process of how a degraded patch of the forest becomes gradually colonized by other species and finally develops into a good forest.

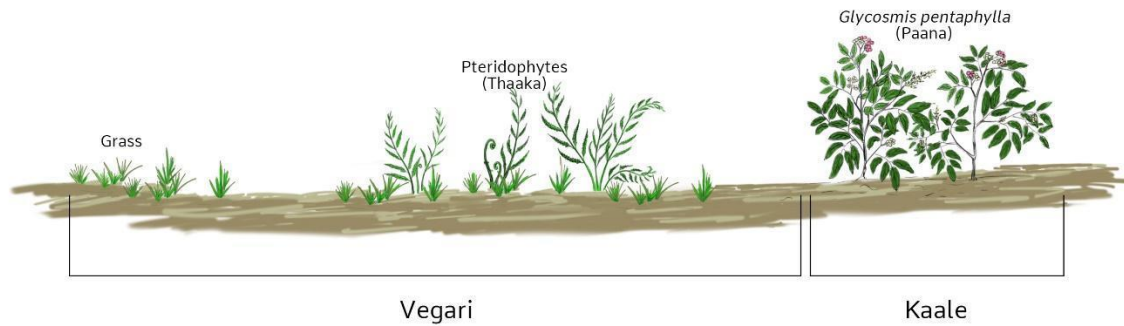


Fig. 4.12 Secondary succession in wet areas of the forest

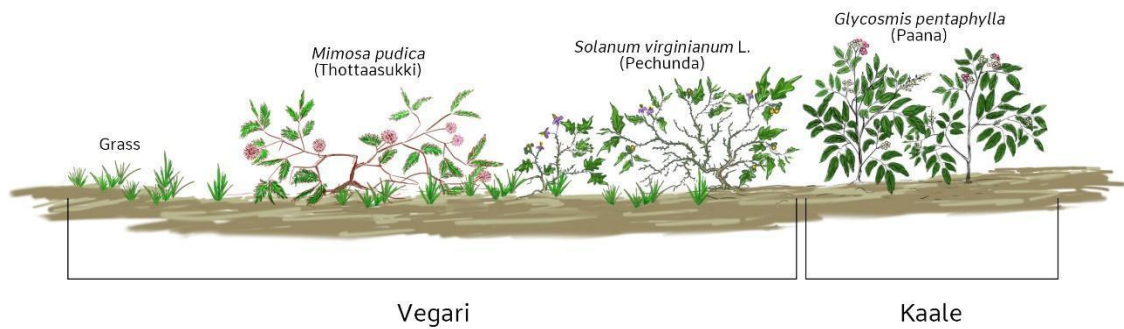


Fig. 4.13 Secondary succession in dry areas of the forest

#### 4.3.5.3.1.1 Mono climax theory or Climatic climax theory

According to the *Kadar* ethnic community the succession or the ecosystem development end up in rainforest but at the same time they believe it is to be dependent on topography and climate of the region. They observe that peaks of hills ends in grasslands ‘*Padam*’ predominated with *Strobilanthus* and ‘*Chola*’ or shola forests in the gaps of or ridges. They belief succession culminates in a climatic climax (Clements, 1936, Gleason 1926). At the same time *Kadar* observe this culmination depends on the climate and strictly

not the same vegetation and are different in line with the poly climax theory (Tansley, 1935) and the Climax Pattern theory (Whittaker, 1953).

### **Summary and Conclusion**

The *Kadar* indigenous community have more ethnoecological knowledge when comparing to the *Malasar* that may be attributed to ancient historical relationship with the forest in the Anamalai landscape of the Western Ghats and also due their aboriginal nature as an endemic indigenous community. The ethnoecological knowledge chiefly synecological and the autecological nature including ecological relationships, processes such as succession and ecological concepts and theories were discussed. Documented thirty-two terminologies for defining the topographical and terrain features of landscape of which 25 are unique to *Kadar* that are not used in Tamil or Malayalam regional languages. The present study revealed more on some of the observations of Bachan *et al.*, (2016) that the *Kadars* have unique terminologies for each terrain feature of their surroundings such as mountains, rocks, valleys, rivers, rivulets, etc. These are comparable with the five major terrain features Hill, Ridge, Valley, Saddle, and Depression and the three minor terrain features: Draw, Spur, and Cliff provided by Hutchinson *et al.*, (1996). Naming of these also has a pattern, where all the topographical features were named similarly, usually adding a suffix or an adjective, that refers to a sub-feature indicating their relationship or knowledge. Whereas the *Malasar* community uses 11 terminologies of which only three are unique to them. The *Kadar* identifies four seasons, has terms of their language and supporting narrations based on the flowering phenology and various changes in the biota around them. The *Malasar* also recognises four seasons but the terminologies are more similar to traditional Malayalam. The *Kadar* identify six important forest types and five edaphic type or degradation stages as separate vegetation in the Anamalai landscape which is comparable to important

classification of forest types provided by Champion and Seth (1968). Whereas the *Malasar* identify only four types as per their indigenous language.

Both the communities recognise the essential relationship of organisms in the ecosystem that the food chain and food web. The *Kadar* has very detailed knowledge about the predatory relationship in the rainforest whereas that of the *Malasar* are of dry forest regions and grasslands. The indigenous community recognise other ecological relationships such as mutualism, parasitism, commensalism, migration and so on with very unique examples. They describe the seed dispersal as one of the very essential and beautiful relationships, whereas the animals and birds get benefited with food and the plants get propagated. *Kadar* recognizes mode and agents of seed dispersal of 127 plant species. The flowering phenology as an indication of onset of various seasons is an inherent knowledge in the indigenous community and the *Kadar* recognise the phenology of 28 important evergreen forest taxa chiefly trees. The autecological knowledge of the *Kadar* is narrated with their in-depth understanding of endemic and threatened species which has flagship values such as Great Hornbill, King Cobra, Lion-Tailed Macaque, Asian Elephant, Malabar Giant Squirrel and the Tiger. The synecological knowledge of the ethnic community is depicted here with their knowledge on the Ecological succession where they differentiate the primary and secondary succession. Also, they have terminologies for both the pioneer and seral communities, '*Vegari*' and '*Kale*' respectively. Their knowledge on succession is also defining the climatic climax and polyclimax in line with the thoughts of Tansley (1935).

## ***Chapter 5***

## **ETHNOECOLOGY OF KADAR AND MALASAR INDIGENOUS COMMUNITY – SUMMARY AND CONCLUSION**

The ethnoecology has been evolved from the Indigenous Traditional Knowledge (ITK) within the indigenous communities. The ITK has evolved to such manner that the UN Declaration on the Rights of Indigenous Peoples (UNDRIP) defines and provides mandatory background information and legal protection for ITK. The Convention on Biological Diversity (CBD) recognises the role of TK and traditional language expressions in protection of biodiversity, ecosystems and landscapes. The World Trade Organization Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs) has set rules to protect Intellectual Property Rights (IPR) binding to CBD and this has been reflected in the Biological Diversity Act (2002) of India. Special provisions for claiming IPR for indigenous people are there in the Forest Right Act (2006). The Government of India has set up a digital library system for Traditional Knowledge.

Even though such advancement has happened in the research and understanding of ITK the studies on Traditional Ecological Knowledge or ethnoecology from the Indian region are very scarce. According to Sharma (2021), all the ITK has a close relationship with the natural environment, ecosystems, habitat and biodiversity. These have been perceived as scientifically validated technique and knowledge). The ecological aspect of indigenous knowledge including ecological processes and the relationship between humans, animals, plants, and physical elements of the local environment is called Ethnoecology. Casagrande (2017) defines Ethnoecology as the cross-cultural study of how people perceive and manipulate their environments. Research on ethnoecology provides an in-depth understanding of the dynamic relations between the indigenous community and the biodiversity around and also with the socio- cultural system. These have been preserved as



traditional knowledge systems acquired through hundreds of years of experience and usually passed on through generations as oral history.

Here, the Ethnoecological knowledge of *Kadar* and *Malasar* tribe in the Anamalai Landscape of the Southern Western Ghats were explored. The former is an ancient tribe with negroid traits completely endemic to the rainfed regions of the Anamalai part of Western Ghats rich in bioclimatic, ecosystem and biological diversity. The *Kadar* are distributed in 22 villages within the Anamalais of which 16 are in Kerala and six in Tamil Nadu. The *Malasar* are more on the drier part of the Anamalai landscape which is exposed to the Palghat Gap and eastern plains of the Deccan plateau. They are seen in 66 villages of which 56 are Kerala and 10 are in Tamil Nadu. The study provided an in-depth knowledge on the Ethnoecological knowledge related to flora, fauna, terrain, climate, season, forest types, ecological relationship and ecological process and theories such as ecological succession and ecological niche.

This doctoral work has documented 443 plant taxa known to *Kadar* indigenous community of which 416 are angiosperms, two gymnosperms, ten pteridophytes, two algae and 13 fungi. This is 5-8 times greater than previous studies on *Kadars* by Vineesha and Bachan (2016) which documented 79 taxa, Sabeena *et al.*, (2016) 44 medicinal plants, Udayan *et al.*, (2005) 41 plants and Chaithanya *et al.*, (2015) 55 plants. The present study has brought good documentation of floristic knowledge of *Kadar* which more than that recorded for other indigenous communities across Kerala such as (Purushothaman and Irfana 2020) which documented 19 taxa for Kani Tribe and 22 for Kurichyar community. Ajesh and Kumuthakalavalli (2012) 29 plants from Urali tribes, Binu (2011) 10 plants used by six tribal communities such as Malam pandaram, Urali, Mala arayan, Ulladan, Malakkuarava and

Malavedan of the Pthanamthitta District, Prasad and Shyama (2013) 66 plants form the Vythiri thaluk of Waynad District.

Among the 443 plant taxa known to *Kadar*, 253 species, 16 genus and 8 families have their own nomenclature. These include 32 threatened species listed by IUCN Red List and 34 endemic species. The *Kadar* named Angiosperms as ‘*Poonath*’, Pteridophytes as ‘*Thaaka*’, Algae as ‘*Payaru*’, Fungi as ‘*Kumin*’, and Lichen as ‘*Pasuru*’. They have unique terminologies for families such as ‘*Nakara*’ (Elaeocarpaceae), ‘*Chevukodi*’ (Lauraceae), ‘*Thettam*’ (Dioscoriaceae), ‘*Karimaram*’ (Ebnaceae) and so on. They named genus such as ‘*Maravu*’ for *Ficus* or the fig trees, ‘*Nara*’ for *Syzygium* or the black plum, ‘*Charalpazham*’ for *Flacourtia*, ‘*Adaku*’ for *Amaranthus*, and ‘*Nangu*’ for *Mesua*. The ‘*Kalpain*’ *Dipterocarpus indicus*, ‘*Ennappayn*’ *Prioria pinnata*, ‘*Karimbudal*’ *Diospyros crumenata*, ‘*VinayaliChembil*’ *Dysoxylum malabaricum* are some of the examples of the threatened species.

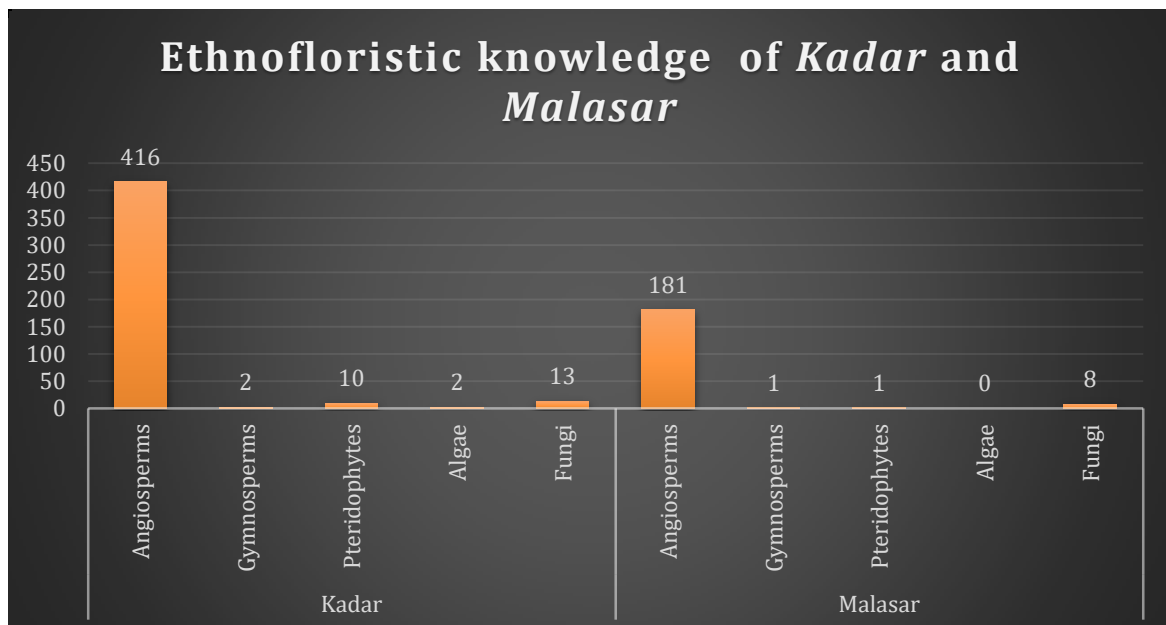


Fig. 5.1 Ethnofloristic knowledge of *Kadar* and *Malasar*.

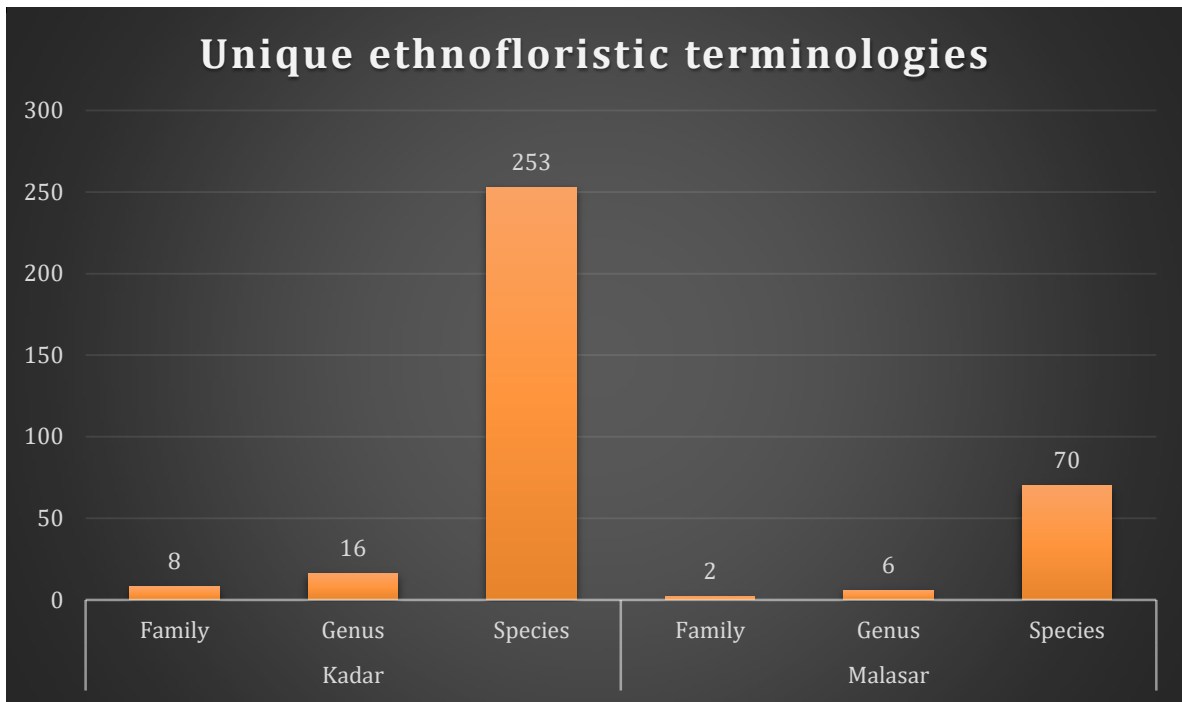


Fig. 5.2 Unique ethnofloristic terminologies.

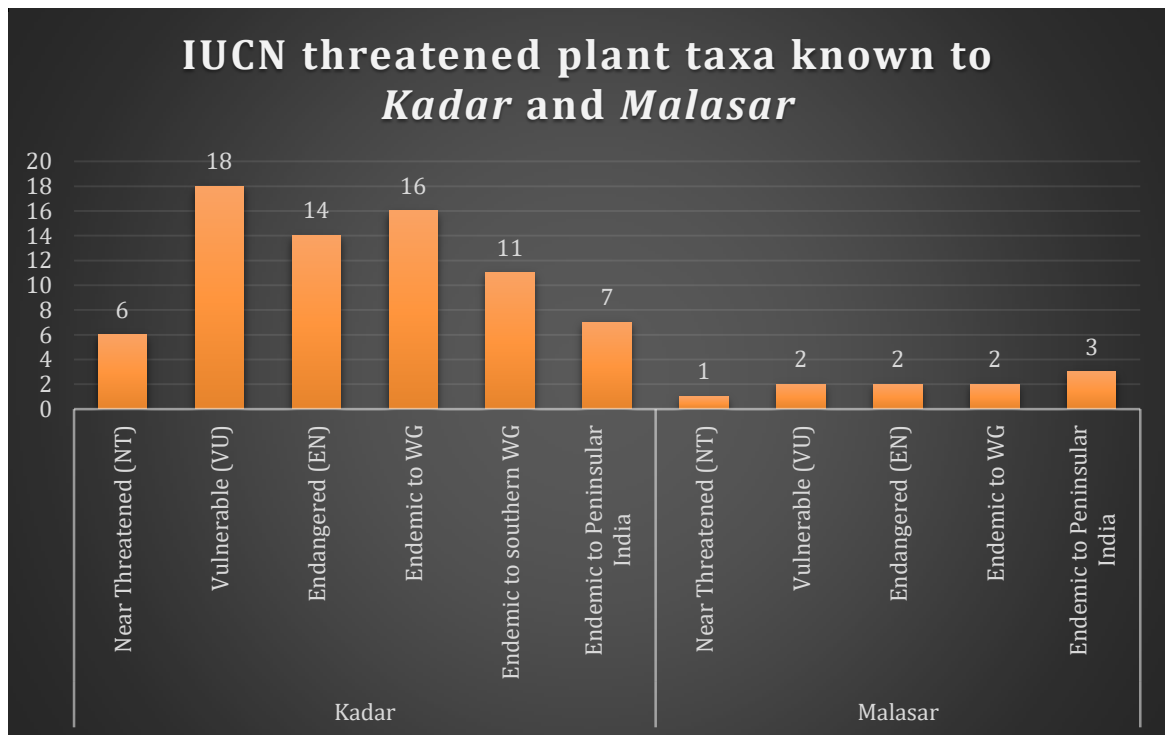


Fig. 5.3 IUCN threatened plant taxa known to *Kadar* and *Malasar*.

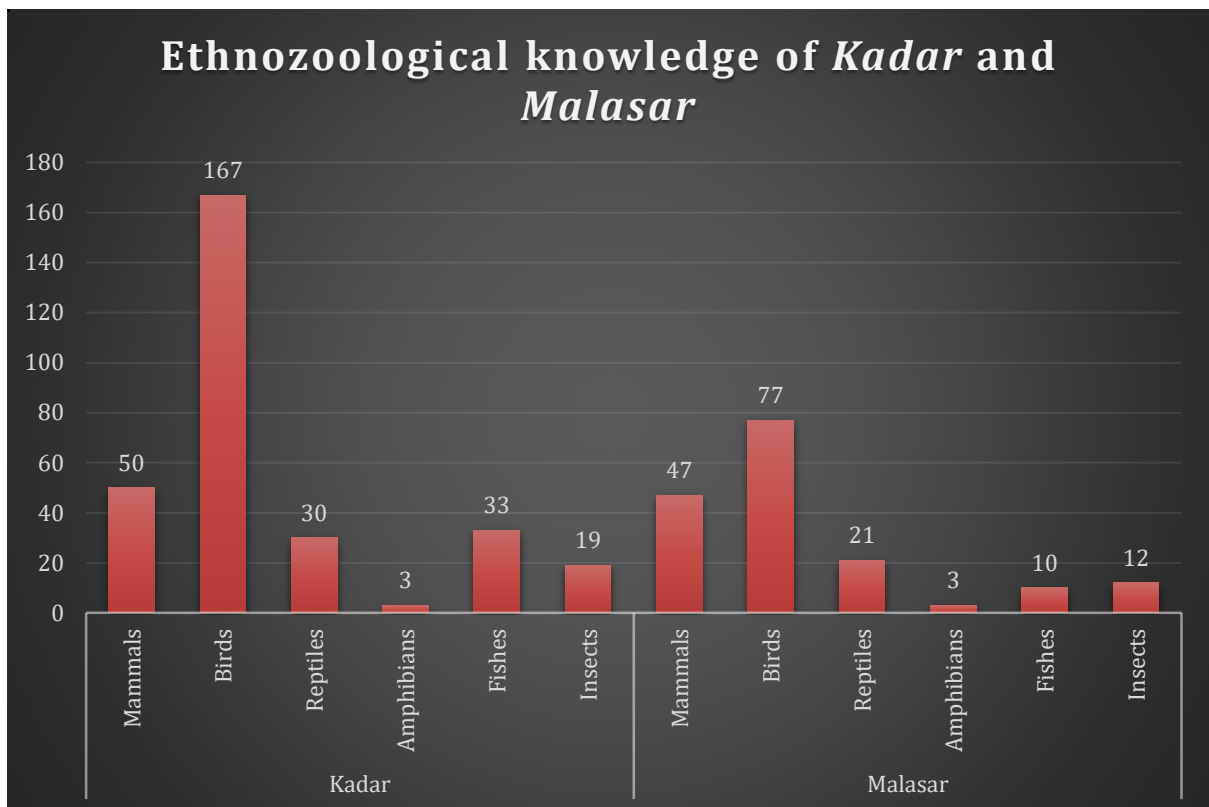


Fig. 5.4 Ethnozoological knowledge of *Kadar* and *Malasar*.

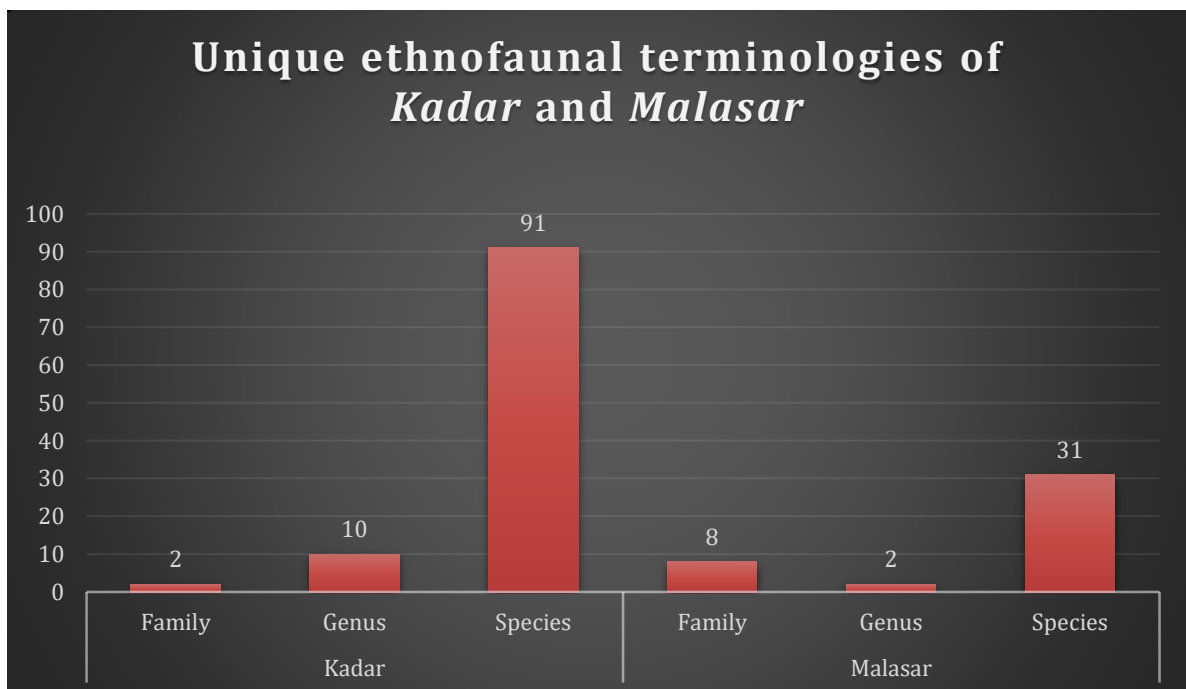


Fig. 5.5 Unique ethnofaunal terminologies of *Kadar* and *Malasar*.

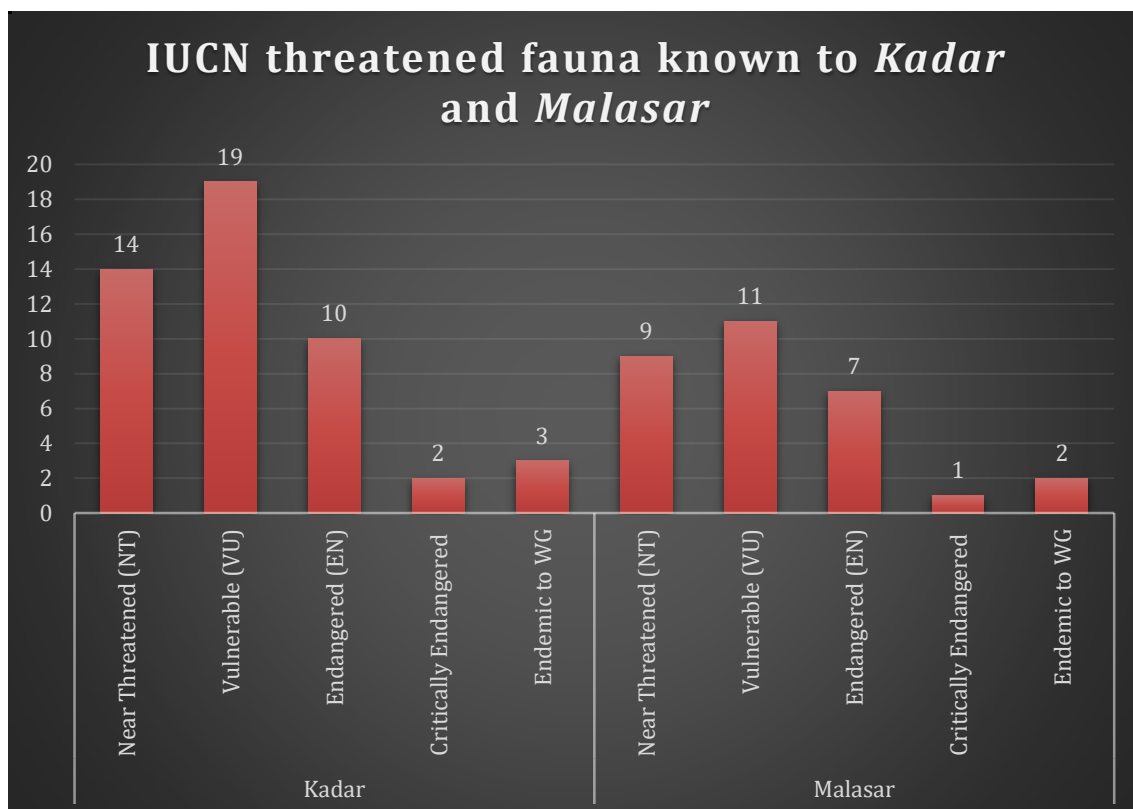


Fig. 5.6 IUCN threatened fauna known to *Kadar* and *Malasar*.

The ethnofloristic knowledge of the *Malasar* community is restricted to a total of 191 taxa of which 181 are angiosperms, one for gymnosperm and pteridophyte respectively and eight Fungi. Among these 70 species, 6 genus and two families have nomenclature unique to the *Malasar*. The *Malasar* recognise only 4 species from the IUCN threatened category and five endemics. These include naming for ‘*Lakiri*’ for the leafy vegetable in common and the *Amaranthus caudatus* is called ‘*Thandanlakri*’ and the *Trianthema portulacastrum* is called as ‘*Seranilakri*’. They commonly call *Dioscorea* as ‘*Shangu*’ these include ‘*Kaavuthshangu*’ (*Dioscorea alata*), ‘*Noopashangu*’ (*Dioscorea bulbifera*), ‘*Thalishangu*’ (*Dioscorea hispida*).

The ethnozoological knowledge of the *Kadar* indigenous community includes 302 species of which 167 are birds, 50 mammals, 33 fishes, 30 reptiles, 19 insects and three

amphibians. This could be one of the richest and important documentation from any Indigenous community across the country. Among these the *Kadar* have their own nomenclature for 91 species, 10 genus and two families. Among these 31 are IUCN threatened species. Apart from nomenclature for important and major animals such as Tiger 'Variyan' or 'Mattan', Nilgiri Langur 'Karimanthi', the *Kadar* have names for rare animals in the rainforest terrain. These include name 'Chemboothaveruk' for Stripe-Necked Mongoose, 'Kurunthenunniveruku' for Ruddy Mongoose, 'Poovaliveruku' Brown Palm Civet, 'Venka' for Malabar Giant Squirrel, 'Venkapuli' for Nilgiri Marten, 'Kooran' for Mouse Deer, 'Kolchambi' Slender Loris, 'Pattan' for Flying Squirrel, 'Nallakalynathi' and 'Cheparkalyanathi' for male and female Scarlet Minivets, 'Onkal' for Great hornbill, 'Vattioonkal' for Malabar Pied Hornbill, 'Thellipuravu' for Mountain Imperial Pigeon, 'Ambukettan' Greater Racket-Tailed Drongo, 'Pachakkora' White-Cheeked Barbet, 'Choorā' for Mahseer fish, 'Pachilavetti' for Carnatic Carp, 'Koicha' for Malabar Loach fish, 'Kootupambu' for King Cobra, 'Thattukottan' for Indian Purple Frog and so on.

The Ethnozoological knowledge of the *Malasar* community confined to 170 species of which 77 are birds, 47 mammals, 21 reptiles, three amphibians, 10 fishes and 12 insects. The unique terminologies provided by *Malasar* are for 32 species, 2 genera and eight families. Among these fauna 19 are threatened faun as listed by IUCN red list. These include 'Manthi' for Monkey and 'Kelamaan' for Barking Deer which could be Tamil in origin. Their unique nomenclature includes 'Kadamai' for Sambar Deer, 'Alkatti' for the bird Red-Wattled Lapwing, 'Oolaanthi' for Owlet, 'Pilna' for Babblers and so on.



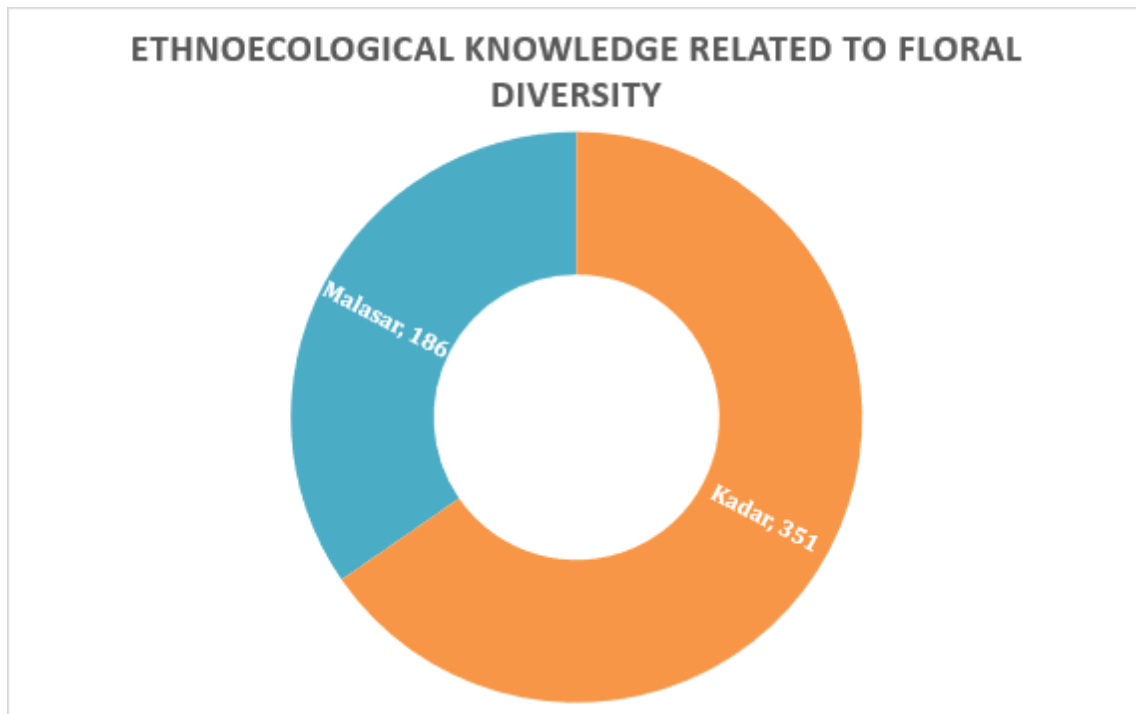


Fig. 5.7 Ethnoecological knowledge related to floral diversity.

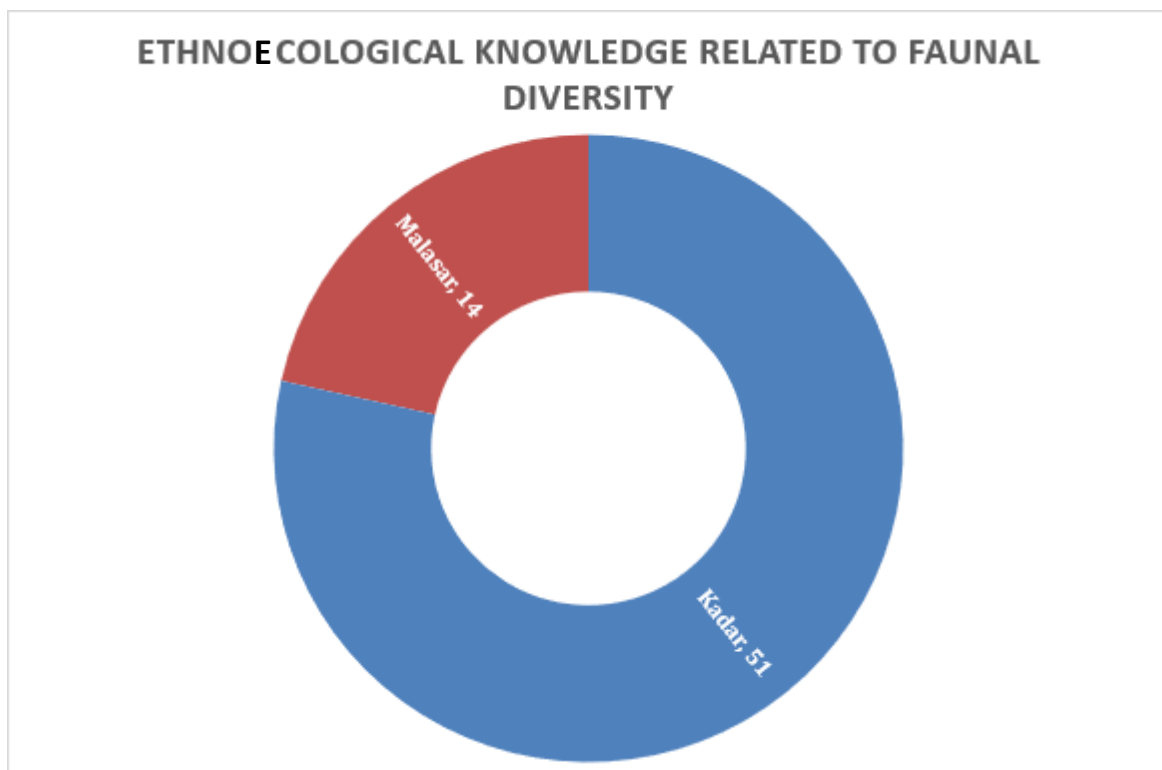


Fig. 5.8 Ethnoecological knowledge related to faunal diversity.

The *Kadar* indigenous community have ethnoecological knowledge related with 351 plant taxa and for the *Malasar*, which are 186. The *Kadar* have ethnoecological knowledge on 51 species of fauna whereas the *Malasar* have only the 14. This difference could be chiefly due to antiquity of the *Kadar* ethnic community compared to the *Malasar* and also due to the umbilical affinity of *Kadars* to the rainforest river valleys and mountains of the Anamalai. The present study reveals ethnomedicinal knowledge of *Kadar* for 128 plant taxa which is much more higher than that of the previous records 79 taxa (Sabeena *et al.*, 2016), 44 (Udayanet *et al.*, 2005), 55 (Chaithanya *et al.*, 2015). The medicinal plant knowledge of *Malasar* are restricted to 71 plant species of which the community have ethnoecological knowledge related with medicinal property. The ethnic knowledge related with livelihood and culture, 45 plants followed by 21 as Minor Forest Produce, 11 species related with believes and worships and seven taxa are used as part of traditional custom by the *Kadar* indigenous community. They have rich knowledge in leafy vegetables with 31 taxa, edible fruit with 51 taxa, seven rhizomes, 12 tubers, six tender shoots, seven beverages, six masticators and 14 seeds from the forest as part of their life. The *Malasar* ethnic community depend on 59 edible fruits 36 leafy vegetables, 12 seed, 14 tubers, eight mushrooms, six tender shoots, four rhizomes, three beverages and three masticators.

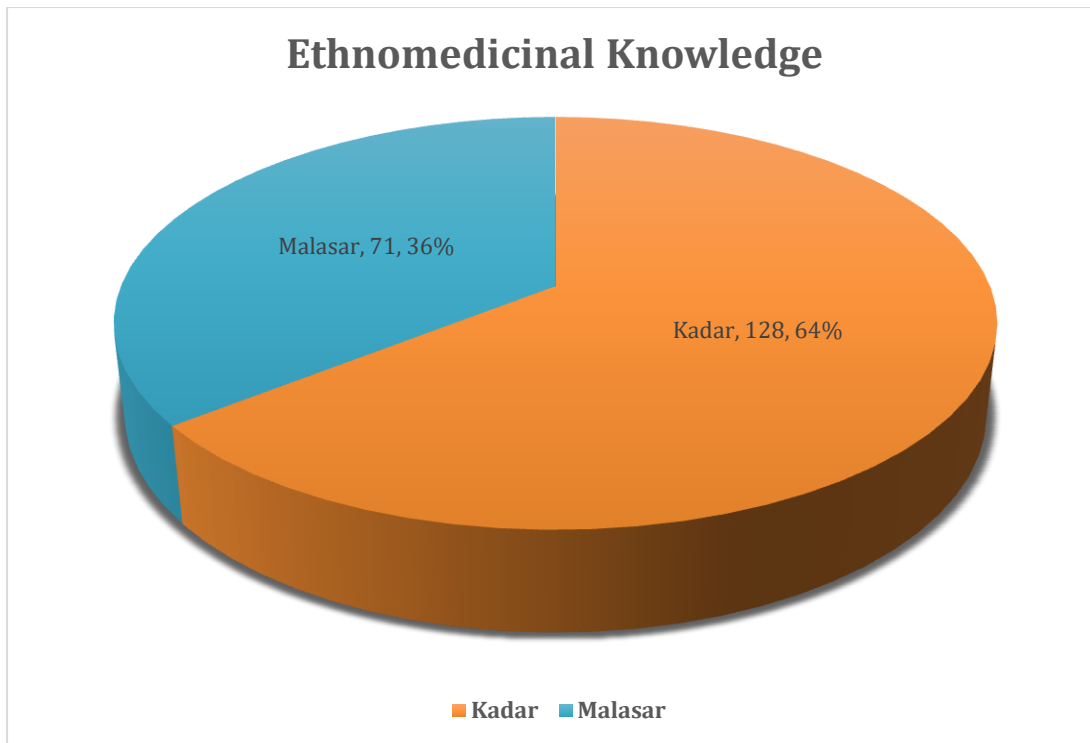


Fig. 5.9 Ethnomedicinal knowledge comparison.

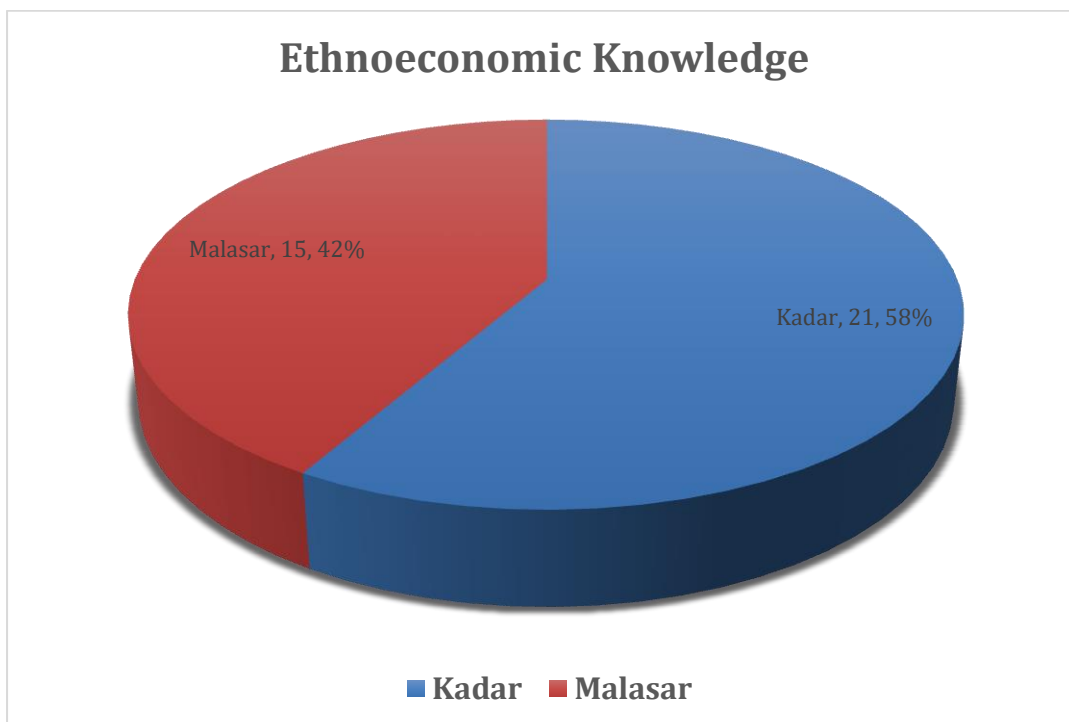


Fig. 5.10 Ethnoeconomic knowledge comparison.

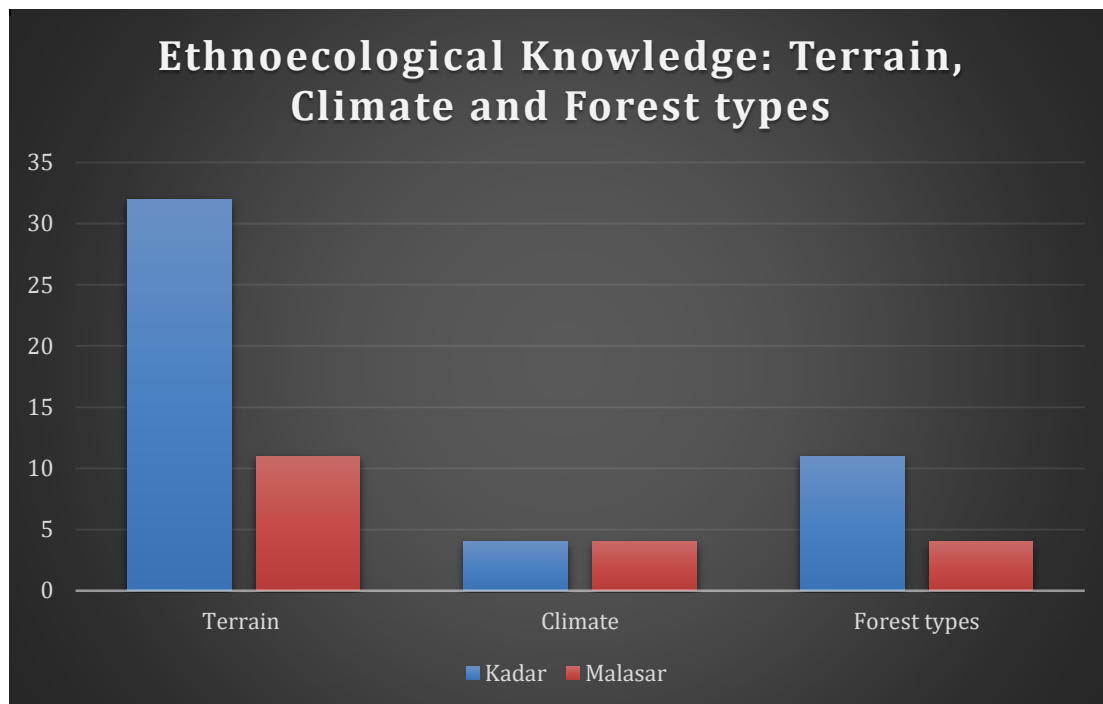


Fig. 5.11 Ethnoecological knowledge: Terrain, Climate & Forest types.

The knowledge about flora and fauna constitutes the biotic part of the ecosystem whereas the indigenous knowledge on terrain and climate contribute to the abiotic part of the ethnoecology. Here, a pattern of naming terrain features has been observed in both the ethnic communities where most of the name include ethnic nomenclature indicating a terrain feature and a suffix added to it. The suffix are usually an indication of the relationship, history or incident. The *Kadar* identify 32 different terrain features which is comparable to five major and three minor terrain features defined by Hutchinson *et al.*, (1996). Bachan *et al.*, (2016) during the mapping of traditional boundaries of *Kadar* villages has observed more than that explained by Hutchinson *et al.*, (1996) and many of the nomenclature for mountains, rivers and other terrain features in the Anamalais on the toposheets of Survey of India during the British period are of *Kadar* origin from its etymology. A detailed account is provided in the chapter 4, the ethnic terrain terminologies by the *Malasar* community is restricted to 11 and most of these are either Tamil or Malayalam origin.

The Anamalai landscape unit is a true representation of unique tropical moist bioclimate of the Southern Western Ghats along with the dry climate of the Deccan Plateau in its eastern slopes. Bachan *et al.* (2014) delineated six major bioclimatic regime within the Anamalais. The ethnoecological knowledge of *Kadar* recognise four seasons and six major forest types corresponding to the bioclimate. The *Kadar* have their own terminology for the seasons ‘*Varyakalam*’ (South-West monsoon), ‘*Kongamaya*’ (North-East monsson), ‘*Kulirkalam*’ (Winter) and ‘*Vedakkalam*’ (Summer) and they have ecological knowledge on various ecological indicators which denotes the onset, peak and end of the seasons. The *Malasar* also identifies three seasons where they term both the monsoon as ‘*Malaikalam*’. The *Kadar* and the *Malasar* community recognise various ecological relationship between different species and that can be classified into different ecological categories such as predation, mutualism, commensalism, competition, parasitism and migration. The *Kadars* believe the relationship for food through the process of eating and being eaten as an essential event and are very complex and inclusive. The food web narrated by *Kadar* indigenous community are more of species restricted to the rainforest bioclimate whereas the *Malasar* are of dry forest and grasslands. A pictorial representation of these are provided in the chapter 4. Among the ecological relationships '*Chochoppa*' bird (unidentified) and tiger. The Malabar Whistling Thrush and the signalling bird flocks are unique examples of mutualism. The dependence of birds, bees and animals for nesting on trees as commensalism, competition within monkey troupes and that of Hornbills and Lion-Tailed Macaque for competition, termitomyces as unique parasitic relationships and migration of fishes, upstream and forest Wagtails are unique examples. The *Kadar* recognises seed dispersal of 127 plant species and phenology of 28 important trees of the forest. The ecological knowledge are more on synecological in nature which narrates importance of each taxa in relation with the environment or other species. The *Kadar* indigenous community have very detailed

autecological knowledge on different biota. Among them that of the Indian Purple Frog ('*Thattukottan*'), King Cobra ('*Koottupambu*'), Great Hornbill ('*Onkal*'), Lion-Tailed Macaque ('*Chettikkurangu*'), Asian Elephant ('*Aana*'), Malabar Gaint Squirrel ('*Venka*'), Tiger ('*Mattan*') are interesting and provided in detail. The concept of ecological succession was put forward by Cowles (1899) and further elaborated by Gleason (1926) and Clements (1936) with their idea on climax community and the climatic climax. The *Kadar* clearly observe and define the process of ecological succession and they have theocratised different seral communities such as '*Vegari*' the pioneer community and the '*Kale*' as the seral community. They also defines the culmination of the ecosystem development into a climax community as defined by the climate where they observe sometimes the climax as rainforest, shola forest or grasslands at the top of the mountains. It could be stated that the *Kadars* ethnoecological knowledge agrees more on polyclimax theory put forward by Tansley (1925) and the climax pattern theory of Whittaker (1953).

The ethnoecological knowledge of *Kadar* could be of great value which is much more greater than that recorded so far since it is based on 443 plant taxa and 302 fauna. This also covers a wide range subtopics which could be important in the realm of ethnoecological studies. Since Conklin (1954) coined the term Ethnoecology many scientist elaborated its scope as an application in wide areas of research, policy and applications. David Casagrande put forward a wide range of publications under the aspects of Ethnoecology since 2000 with his studies among the Maya community. These include ethnomedicinal (Casagrande, 2000), on forest types and conservation (Casagrande, 2004), ethnobiology (Casagrande, 2004), ecological sustainability and restoration (Casagrande and Vasquez, 2009) and climate adaptation (Siders *et al.*, 2021). Martin (2001) explains the definition of the ethnoecology need to be established further in theory and practice, which is limited to the scope of ethnobotany, ethnozoology and economic botany. In this study the *Kadar*'s knowledge goes



beyond the limitations of the existing knowledge bases and topics. The ethnoecological knowledge is placed further beyond the ethnobotany and ethnozoology and its economic aspects. These are systematically placed under traditional topics such as ethnobotanical, ethnozoological, ethnomedicinal, ethnoeconomical, ethnocultural so on whereas the ethnosystematics, ethnoecological knowledge on terrain, geography and climate, ethnoecological knowledge on species relationships and interactions, autecological knowledge on species, ethnoecological knowledge on ecological theories and process provide a great scope in the advancement of ethnoecological studies.

## ***Chapter 6***

## RECOMMENDATIONS

The study is the first ever comprehensive documentation of ethnoecological knowledge of Kadar and Malasar ethnic community endemic to Anamalai part of the Western Ghats in South India. This has elucidated ethnobotanical, ethnozoological and other related aspects of ethnoecological knowledge. The following are the important recommendations of this study.

- The study provides a comprehensive structure and methodology for a systematic ethnoecological research. Hence it can be used as a model for ethnoecological research where it is usually limited to ethnobotany and ethnozoology.
- The results can be added to traditional indigenous knowledge data base of Government of India, National Biodiversity Authority and Kerala State Biodiversity Board (KSBB).
- The traditional resource area and community forest resource map for each village of both the indigenous communities are being prepared under the provisions of Forest Rights Act, 2006.
- The data can be used for the same supporting indigenous community rights recognition.
- Unique terminologies of 253 flora and 91 fauna from Kadar and 70 flora and 31 fauna from Malasar are documented in this study. This can be contributed to enriching our linguistic diversity.
- The ethnofloristic and Ethnofaunal nomenclature can be added to regional biodiversity data base as local names.

- The ethnoecological knowledge include ethnic name for terrain features, forest types, ecological relationships, ecological theories including observations of climate change apart from knowledge on flora and fauna.
- This can be used to prepare indigenous language-based curriculum for the tribal children.
- Nearly 60 to 70% of the flora and fauna documented does not have Malayalam names in the existing data base. So, this can be considered as a contribution to local and Malayalam name for the forest flora and fauna.
- The State Tribal Institution (KIRTADS) can publish the document in Malayalam and indigenous language to make the knowledge available to the community.
- The refined scientific information on various forest resources that is being used for livelihood by the communities can be taken to prepare sustainable harvest and conservation plan for the sake of biodiversity.
- The indigenous knowledge potential for Intellectual Property Right (IPR) could be claimed section 3(1)k of the FRA, 2006 with a resolution of the individual village level Grama sabhas using the thesis as evidence.
- This comprehensive documentation provides future research opportunities in the ethnobotanical, ethnozoological, ethnomedicinal and ethnoecological aspects. The data can be used to develop indigenous language based multilingual field guide on forest plants, animals, fishes, birds, fungus and so on.
- This can aid professional development of the indigenous youth in forest and biodiversity conservation-based employment.

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- WIPO/IGC Policy Objectives and Principles on Traditional Knowledge Protection
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- <http://keralaplants.in/>
- [https://www.inaturalist.org/check\\_lists/75443-Western-Ghats-Check-List](https://www.inaturalist.org/check_lists/75443-Western-Ghats-Check-List)
- <https://ebird.org/home>
- <https://forest.kerala.gov.in/index.php/forest/fauna>
- <https://www.cbd.int/>

***Appendix I***

**APPENDIX - 1**

**DATA COLLECTION FOR Ph.D. STUDY**

**Department of Botany, M.E.S. Asmabi College, P. Vemballur.**

**Schedule relating**

**To**

**ETHNOECOLOGY OF KADAR AND MALASAR ETHNIC COMMUNITY ENDEMIC TO  
ANAMALAIS OF WESTERN GHATS**

**Supervisor:**

**Dr. K. H. Amitha Bachan**

**Assistant professor in Botany**

**M.E.S. Asmabi College.**

**Research Scholar:**

**Gouthami. V**

**Research fellow**

**M.E.S. Asmabi College.**

District :

Name of the settlement :

Name of the tribe

Age :

Gender :

Occupation of the tribe :

1. Do you used to enter in forest areas? Yes  No

2. For what purpose you have been in forest areas?

• Fishing

• Collection of MFPs

• Collection of firewood

• Hunting

• Others

3. From which forest areas you used to collect MFPs, and what are the usual MFPs you have been found there?

Name of the MFPs	Collecting areas	Terrain of the each area	Type of forest each area

4. In which seasons you are into the collection of MFPs?

Name of the MFPs	Name of the season

5. Which are the plants you used for the medicinal purposes?

Name of the medicinal plant	Uses

6. What are the usual plant leaves you collect for food appetite?

Name of the plant	Collecting areas

7. What are the usual wild tuber varieties you collect for food appetite?

Name of the tubers	Collecting areas


8. Which are the plants or trees used for construction, building, gears and toys?

Name of the plant	Uses

9. Do you used to go for fishing? If yes, name the usual places and fishes.

Yes  No

Name of the fish	Fishing areas

10. In your opinion, which is the best season for fishing? And state the reason.

.....  
 .....

11. Have you been cultivated any crops? What are they? Which season? Why?

Yes  No

Name of the crop	Season	Reason

12. Do you know any wild flower? Name it? Where it see? Uses?

Name of the flower	Name of the area	Uses




13. Do you know different terrain features, how can you learn it?

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 ...  
 .....

14. Do you know different forest types, how can you learn it?

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 ...  
 .....

15. Have you seen any butterflies either bird surrounding flower plants? Mention the name? Which are they?

Name of the butterflies	Name of the birds

16. Why the birds and butterflies coming to the plant?

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17. What are the animals you see most? What is the reason?

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18. What are the animals you love (apart from the above)? Reason?

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 .....

19. Which animals or birds help you in the forest? How? Reason?

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.....

20. Any incident of yours helping any animal? Or bird? How? Why?

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.....  
.....

21. Which plant, you love, why?

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.....  
...

22. Which are the plants indicate something in the forest? How? Reason?

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...  
.....

23. Animals which indicate something in the forest? How? Reason?

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24. Can you understand relationship between plants and animals? What are they?

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25. Can you identify different kind of vegetation? How? Which are they?

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26. Can you identify climatic change? How? Which are they?

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25. Do you felt like the forest is degraded, compared to earlier times?

Yes  No

26. If yes, what are the reasons behind it?

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.....  
27. Which are the places you have seen high population of animals and plants?

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28. Name the animals you have seen in forest?

Name of the animal	Forest areas

29. What kind of food those animals prefer?

Name of the animal	Preferred food	Relation between the pray and predator

30. What is the living condition of deer in the tiger occupied forest portion? Why?

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31. Have you heard about the more than one Tiger living in the same forest section?

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32. If yes, what is the reason for it?

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33. Have you any rules you obey inside the forest? why?

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34. What about the condition of environment in between the grassland deep forest?

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35. Do you know the food source for Grass hoppers and Caterpillars? What do you know about the primary producers of nature?

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36. Do you aware about the relationship among Plants, Grass hopper, Frog, Snake, and Hawks? What is it? How you learn it?

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37. Do you know the connection between plants and all organisms based on food habitat? What do you call such process?

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38. Did you observe Pond, River and swamps? What are the differences between them and which kind of animals are been seen by the different landscape of the forest?

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39. What did you know about the different ecosystem of the forest?

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40. Do you know any place in which the plants kept growing and became forests where the rivers either stream were dried poorly?

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41. If you know such place, what will you call the process?

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42. Do you know how these forests have been born and developed?

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43. What are the different stages of natural forest development?

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44. Do you know about the different landscape inside the forest?

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45. Do you know the climax condition of the forest? If you know, mention several climax species of the forest and whether it Monoclimax and Polyclimax?

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***Appendix II***

# I. Ethnic knowledge and Ethnoecological knowledge of floral diversity by *Kadar* ethnic community

## I.a. Angiosperms

### Acanthaceae

1. Scientific name : ***Andrographis elongata* (Vahl) T. Anderson**  
Terminology of *Kadar* : '*Changilikurinji*'  
Ethnomedicinal knowledge : Nil  
Ethnoeconomical knowledge : Nil  
Ethniclivelihood knowledge : Nil  
Ethnoecological knowledge : This plant seen in '*Pachakaadu*' (Evergreen forest).  
Flowering in summer season.  
Other information : The inflorescence is like a chain (racemose inflorescence). The terminology '*Changilikurinji*' came from the character of the plant they observed.

2. Scientific name : ***Andrographis paniculata* (Burm. f.) Nees**  
Terminology of *Kadar* : '*Changilikurinji*'  
Ethnomedicinal knowledge : Leaves used for the treatment of Intestinal worm.  
Ethnoeconomical knowledge : Nil  
Ethniclivelihood knowledge : Nil  
Ethnoecological knowledge : This plant seen in '*Pachakaadu*' (Evergreen forest).  
Flowering in summer season.  
Other information : The inflorescence is like a chain (racemose inflorescence). The terminology '*Changilikurinji*' came from the character of the plant they observed.

3. Scientific name : ***Dicliptera cuneata* Nees.**  
Terminology of *Kadar* : '*Kurinji*'  
Ethnomedicinal knowledge : Nil

Ethnoeconomical knowledge : Nil  
Ethniclivelihood knowledge : Nil  
Ethnoecological knowledge : It's seen in '*Pottalkad*' (Dry deciduous forest).  
Flowering in '*Kulirkaalam*' (Winter)  
Other information : Nil

4. Scientific name : ***Ecbolium viride* (Forssk.) Alston**  
Terminology of *Kadar* : '*Kurinji*'  
Ethnomedicinal knowledge : Nil  
Ethnoeconomical knowledge : Nil  
Ethniclivelihood knowledge : Nil  
Ethnoecological knowledge : It's seen in '*Pottalkad*' (Moist deciduous forest).  
Flowering in '*Kulirkaalam*' (Winter)  
Other information : Nil

5. Scientific name : ***Gymnostachyum pubescens* (Lam.) M. R. Almeida**  
Terminology of *Kadar* : '*Kurinji*'  
Ethnomedicinal knowledge : Nil  
Ethnoeconomical knowledge : Nil  
Ethniclivelihood knowledge : Nil  
Ethnoecological knowledge : It's seen in '*Peradaavi*' (Rainforest), '*Pachakkaadu*'  
(Evergreen forest)  
Other information : Nil

6. Scientific name : ***Strobilanthes alternata* (Burm. f.) Moylan ex  
J. R. I. Wood**  
Terminology of *Kadar* : '*Chikkambuvu*'  
Ethnomedicinal knowledge : Leaves used for wound healing  
Ethnoeconomical knowledge : Nil

Ethniclivelihood knowledge : Nil  
Ethnoecological knowledge : Commonly planted this nearby hut and growing in water available areas.  
Other information : Nil

7.Scientific name : ***Justicia gendarussa* Burm. f.**  
Terminology of *Kadar* : 'Vathamkolli'  
Ethnomedicinal knowledge : Leaves used against body pain  
Ethnoeconomical knowledge : Nil  
Ethniclivelihood knowledge : Nil  
Ethnoecological knowledge : It's seen in '*Pottalkad*' (Moist deciduous forest).  
Other information : Nil

8.Scientific name : ***Justicia santapau* Bennet.**  
Terminology of *Kadar* : '*Kurinji*'  
Ethnomedicinal knowledge : Nil  
Ethnoeconomical knowledge : Nil  
Ethniclivelihood knowledge : Nil  
Ethnoecological knowledge : It's seen in '*Peradaavi*' (Rainforest).  
Other information : Nil

9.Scientific name : ***Phaulopsis imbricata* (Forssk.) Sweet.**  
Terminology of *Kadar* : '*Kurinji*'  
Ethnomedicinal knowledge : Nil  
Ethnoeconomical knowledge : Nil  
Ethniclivelihood knowledge : Nil  
Ethnoecological knowledge : Seen in everywhere in the forest  
Other information : Nil

10. Scientific name : ***Rhinacanthus nasutus* (L) Kurz**  
Terminology of *Kadar* : '*Vellakurinji*'  
Ethnomedicinal knowledge : Nil  
Ethnoeconomical knowledge : Nil  
Ethniclivelihood knowledge : Nil  
Ethnoecological knowledge : It's seen in shade areas of the forest  
Other information : Nil

11. Scientific name : ***Ruellia prostrata* Poir.**  
Terminology of *Kadar* : '*Thuppalampotti*'  
Ethnomedicinal knowledge : Nil  
Ethnoeconomical knowledge : Nil  
Ethniclivelihood knowledge : Nil  
Ethnoecological knowledge : It's seen everywhere in their living area  
Other information : when applying saliva to the dried fruit of the plant, it does rupture.

12. Scientific name : ***Rungia pectinata* (L.) Nees**  
Terminology of *Kadar* : '*Kurinji*'  
Ethnomedicinal knowledge : Nil  
Ethnoeconomical knowledge : Nil  
Ethniclivelihood knowledge : Nil  
Ethnoecological knowledge : It's commonly seen in road sides  
Other information : Nil

13. Scientific name : ***Rungia wightiana* Wall. ex Nees**  
Terminology of *Kadar* : '*Kurinji*'  
Ethnomedicinal knowledge : Nil

Ethnoeconomical knowledge : Nil  
Ethniclivelihood knowledge : Nil  
Ethnoecological knowledge : It seen in '*Pachakkad*' (Evergreen forest).  
Other information : Nil

14. Scientific name : ***Strobilanthes ciliata* Nees**  
Terminology of *Kadar* : '*Karimkurinji*'  
Ethnomedicinal knowledge : Leaves used for stomach pain and for diabetics  
Ethnoeconomical knowledge : Nil  
Ethniclivelihood knowledge : Nil  
Ethnoecological knowledge : Seen in '*Pachakkad*' (Evergreen forest), '*Peradaavi*' (Rainforest).  
Other information : Nil

#### **Acoraceae**

Scientific name : ***Acorus calamus* L.**  
Terminology of *Kadar* : '*Vasambu*'  
Ethnomedicinal knowledge : Dried rhizome powder used for diarrhoea.  
Ethnoeconomical knowledge : Nil  
Ethniclivelihood knowledge : Nil  
Ethnoecological knowledge : It seen in '*Pathaal*' (Marshy grass land)  
Other information : Nil.

#### **Achariaceae**

15. Scientific name : ***Hydnocarpus alpina* Wight**  
Terminology of *Kadar* : '*Vetti*'  
Ethnomedicinal knowledge : Nil  
Ethnoeconomical knowledge : Seeds are MFP.

Ethniclivelihood knowledge : The *Kadar* will not use the head of fish for eating when the time of flowering and fruiting of *Hydnocarpus*.  
Ethnoecological knowledge : Seen in '*Pachakkad*' (Evergreen forest), '*Peradaavi*' (Rainforest). Flowering in summer.  
Other information : The fruits are eaten by fishes.

16.Scientific name : ***Hydnocarpus macrocarpa* (Bedd.) Warb.**  
Terminology of *Kadar* : '*Vetti*'  
Ethnomedicinal knowledge : Nil  
Ethnoeconomical knowledge : Seeds are MFP.  
Ethniclivelihood knowledge : The *Kadar* will not use the head of fish for eating when the time of flowering and fruiting of *Hydnocarpus*.  
Ethnoecological knowledge : Seen in '*Pachakkad*' (Evergreen forest), '*Peradaavi*' (Rainforest). Flowering in summer.  
Other information : The fruits are eaten by fishes.

17.Scientific name : ***Hydnocarpus pentandrus* (Buch-Ham.) Oken**  
Terminology of *Kadar* : '*Vetti*'  
Ethnomedicinal knowledge : Nil  
Ethnoeconomical knowledge : Seeds are MFP.  
Ethniclivelihood knowledge : The *Kadar* will not use the head of fish for eating when the time of flowering and fruiting of *Hydnocarpus*.  
Ethnoecological knowledge : Seen in '*Pachakkad*' (Evergreen forest), '*Peradaavi*' (Rainforest). Flowering in summer.  
Other information : The fruits are eaten by fishes.

### **Amaranthaceae**

18.Scientific name : ***Achyranthes aspera* L.**



Terminology of *Kadar* : '*Uruva chedi*'  
 Ethnomedicinal knowledge : Whole plant used for body pain.  
 Ethnoeconomical knowledge : Nil  
 Ethnolivelihood knowledge : Nil  
 Ethnoecological knowledge : It is distributed in everywhere in the '*Velinkkad*' (Dry deciduous forest) and '*Pottalkad*' (Moist deciduous forest). Flowering and fruiting in '*Kulirikaalam*' (Winter). Seed dispersed through animals and human.  
 Other information : Nil

19. Scientific name : ***Achyranthes aspera* var. *porphyristachya* (Wall. ex Moq.) Hook. f.**  
 Terminology of *Kadar* : '*Uruva chedi*'  
 Ethnomedicinal knowledge : The paste from grounded leaves and charcol is used to cure wound in dogs.  
 Ethnoeconomical knowledge : Nil  
 Ethnolivelihood knowledge : Nil  
 Ethnoecological knowledge : It is distributed in everywhere in the '*Velinkkad*' (Dry deciduous forest) and '*Pottalkad*' (Moist deciduous forest). Flowering and fruiting in '*Kulirikaalam*' (Winter). Seed dispersed through animals and human.  
 Other information : Nil

20. Scientific name : ***Achyranthes aspera* var. *pubescens* (Moq.) M. Gómez**  
 Terminology of *Kadar* : '*Uruva chedi*'  
 Ethnomedicinal knowledge : Nil  
 Ethnoeconomical knowledge : Nil  
 Ethnolivelihood knowledge : Nil  
 Ethnoecological knowledge : It is distributed in everywhere in the '*Velinkkad*' (Dry deciduous forest), '*Pottalkad*' (Moist deciduous forest) and road sides. Flowering and fruiting in '*Kulirikaalam*' (Winter). Seed dispersed through animals and human.

Other information : Nil

21. Scientific name : ***Alternanthera sessilis* (L.) R. Br. ex DC.**  
Terminology of *Kadar* : '*Ponnankanniadaaku*', '*Komanampeeriyadaaku*'  
Ethnomedicinal knowledge : The whole plant used to improve eye vision.  
Ethnoeconomical knowledge : Nil  
Ethniclivelihood knowledge : Tender stem and leaves used to curry making  
Ethnoecological knowledge : It is distributed in everywhere in the shady areas and '*Pathal*' (Marshy grass land).  
Other information : Nil

22. Scientific name : ***Amaranthus caudatus* L.**  
Terminology of *Kadar* : '*Aadak*'  
Ethnomedicinal knowledge : Nil  
Ethnoeconomical knowledge : Nil  
Ethniclivelihood knowledge : Leaves used to curry making.  
Ethnoecological knowledge : Seen in wasteland.  
Other information : Nil

23. Scientific name : ***Amaranthus spinosus* L.**  
Terminology of *Kadar* : '*Mullanadaak*'  
Ethnomedicinal knowledge : Nil  
Ethnoeconomical knowledge : Nil  
Ethniclivelihood knowledge : Leaves used to curry making  
Ethnoecological knowledge : Seen in wasteland.  
Other information : The plant has spines in its stem. The terminology '*Mullanadaak*' is derived from the character of the stem.

The term '*Mullu*' means spine and the term '*Adaak*' means leafy vegetable.

24. Scientific name : ***Amaranthus tricolor L.***  
Terminology of *Kadar* : '*Chethathandali mullanadaak*'  
Ethnomedicinal knowledge : Nil  
Ethnoeconomical knowledge : Nil  
Ethniclivelihood knowledge : Leaves used to curry making  
Ethnoecological knowledge : Seen in wasteland.  
Other information : The stem of the plant has a red colour, so they called Chethathandali, ('*Chetha*' means red colour, '*Thandu*' means stem, '*Aali*' denoted a thing, individual and used as a suffix)

25. Scientific name : ***Amaranthus viridis L.***  
Terminology of *Kadar* : '*Pattiaadak*'  
Ethnomedicinal knowledge : Nil  
Ethnoeconomical knowledge : Nil  
Ethniclivelihood knowledge : Leaves used to curry making  
Ethnoecological knowledge : Seen in wasteland.  
Other information : Nil

26. Scientific name : ***Beta vulgaris L.***  
Terminology of *Kadar* : '*Chorathettam*'  
Ethnomedicinal knowledge : Nil  
Ethnoeconomical knowledge : Nil  
Ethniclivelihood knowledge : Root tuber used to curry making  
Ethnoecological knowledge : Nil

Other information : The colour of the tuber ('*Thettam*') like blood ('*Chora*') so they called '*Chorathettam*'.

27. Scientific name : ***Celosia argentea L.***  
Terminology of *Kadar* : '*Panna adaaku*'  
Ethnomedicinal knowledge : Nil  
Ethnoeconomical knowledge : Nil  
Ethniclivelihood knowledge : Tender leaves used to curry making  
Ethnoecological knowledge : Seen in '*Pural*' (Open rocky area)  
Other information : Nil

28. Scientific name : ***Cyathula prostrata (L.) Blume***  
Terminology of *Kadar* : '*Cheriyuruva*'  
Ethnomedicinal knowledge : Nil  
Ethnoeconomical knowledge : Nil  
Ethniclivelihood knowledge : Nil  
Ethnoecological knowledge : It's seen in road sides. And the seeds are dispersed through human and dog.  
Other information : Nil

### **Anacardiaceae**

29. Scientific name : ***Holigarna arnottiana Wall. ex Hook. f.***  
Terminology of *Kadar* : '*Karimcheru*'  
Ethnomedicinal knowledge : Nil  
Ethnoeconomical knowledge : Nil  
Ethniclivelihood knowledge : Nil  
Ethnoecological knowledge : Seen in bank of streams, rivers, and rivulets. Seeds are eaten by animals, fishes, and birds

Other information : Allergic, when the fruiting time of the plant, *Kadar* avoids the head of '*Pachilavetti*' fish for cooking to avoid vomiting in kids.

30.Scientific name : ***Holigarna beddomei* Hook. f.**

Terminology of *Kadar* : '*Vattilacheru*'

Ethnomedicinal knowledge : Nil

Ethnoeconomical knowledge : Nil

Ethniclivelihood knowledge : Nil

Ethnoecological knowledge : Seen in bank of streams, rivers, and rivulets. Seed are eaten by animals and birds.

Other information : It causes allergic to others.

31.Scientific name : ***Holigarna ferruginea* Marchand**

Terminology of *Kadar* : '*Cheru*'

Ethnomedicinal knowledge : Nil

Ethnoeconomical knowledge : Nil

Ethniclivelihood knowledge : Nil

Ethnoecological knowledge : Seen in bank of streams, rivers, and rivulets. Seed are eaten by animals and birds.

Other information : It causes allergic to others

32.Scientific name : ***Holigarna grahamii* (Wight) Kurz**

Terminology of *Kadar* : '*Vattilacheru*'

Ethnomedicinal knowledge : Nil

Ethnoeconomical knowledge : Nil

Ethniclivelihood knowledge : Nil

Ethnoecological knowledge : Seen in bank of streams, rivers, and rivulets. Seed are eaten by animals and birds.

Other information : It causes allergic to others.

33. Scientific name : ***Lannea coromandelica* (Houtt) Merr.**

Terminology of *Kadar* : '*Karilavu*'

Ethnomedicinal knowledge : Nil

Ethnoeconomical knowledge : Nil

Ethniclivelihood knowledge : Nil

Ethnoecological knowledge : Flowering in '*Vedakaalam*' (summer)

Other information : Nil

34. Scientific name : ***Mangifera indica* L.**

Terminology of *Kadar* : '*Aadaavi manga*' / '*Mangamaram*' / '*Kattumoochi*'

Ethnomedicinal knowledge : Bark is a medicine for toothache and body pain.  
Cotyledons are used to stomach ache.

Ethnoeconomical knowledge : Nil

Ethniclivelihood knowledge : Ripened fruits are raw eaten. Tender fruits are used to cooking and pickle making.

Ethnoecological knowledge : Distributed in '*Pachakkad*' (Evergreen Forest), and '*Peradaavi*' (Rainforest), Flowering and fruiting time is December to May. Fruits eaten by elephants, deers, sloth bears, great hornbills, monkeys and other fauna.

Other information : The leaves are used to decorate the hamlet and shamiana for all ceremony.

35. Scientific name : ***Semecarpus travancoricus* Bedd.**

Terminology of *Kadar* : '*Vattilacheru*'

Ethnomedicinal knowledge : Nil

Ethnoeconomical knowledge : Nil

Ethniclivelihood knowledge : Nil

Ethnoecological knowledge : Seen in river side and streams Fruits are eaten by birds. Pollinated by bees. Seed dispersal by birds.

Other information : Nil

36. Scientific name : ***Solenocarpus indica* Wight & Arn.**

Terminology of *Kadar* : '*Ambekaayi*', '*Molagarasi*'

Ethnomedicinal knowledge : Nil

Ethnoeconomical knowledge : Nil

Ethniclivelihood knowledge : Nil

Ethnoecological knowledge : Seen '*Pachakkad*' (Evergreen Forest) and its a food for monkeys and deer.

Other information : This fruit is bitter taste

37. Scientific name : ***Spondias pinnata* (L. f.) Kurz.**

Terminology of *Kadar* : '*Ambazham*'

Ethnomedicinal knowledge : Nil

Ethnoeconomical knowledge : Nil

Ethniclivelihood knowledge : Fruits are edible and used to making pickle.

Ethnoecological knowledge : '*Velinkaadu*' (Dry deciduouse forest) and flowering in '*Vedakkalam*' (Summer season). It's a food for birds, deers, and monkeys.

Other information : Nil

### **Ancistrocladaceae**

38. Scientific name : ***Ancistrocladus heyneanus* Wall. ex J. Graham**

Terminology of *Kadar* : '*Choolanchappu*'

Ethnomedicinal knowledge : Nil

Ethnoeconomical knowledge : Nil

Ethniclivelihood knowledge : Leaves used to roof for the temporary hut.



Ethnoecological knowledge : Seen '*Pachakkad*' (Evergreen Forest) and '*Peradaavi*' (Rainforest). flowering in '*Vedakkalam*' (Summer season).

Other information : Its leaves give cool effect to hut.

### **Annonaceae**

39. Scientific name : ***Meiogyne pannosa* (Dalzell) J. Sinclair**

Terminology of *Kadar* : '*Vayalachennari*'

Ethnomedicinal knowledge : Nil

Ethnoeconomical knowledge : Nil

Ethniclivelihood knowledge : Nil

Ethnoecological knowledge : It's seen in '*Peradaavi*' (Wet Evergreen Forest).

Other information : Nil

40. Scientific name : ***Desmos ramarowii* (Dunn) D. Das**

Terminology of *Kadar* : '*Kiyathiyolumb*'

Ethnomedicinal knowledge : Nil

Ethnoeconomical knowledge : Nil

Ethniclivelihood knowledge : Nil

Ethnoecological knowledge : It's seen in '*Peradaavi*' (Wet Evergreen Forest).

Other information : Nil

41. Scientific name : ***Milium tomentosum* (Roxb.) Finet & Gagnep.**

Terminology of *Kadar* : '*Nedunaru*'

Ethnomedicinal knowledge : Nil

Ethnoeconomical knowledge : Nil

Ethniclivelihood knowledge : Bark used as rope

Ethnoecological knowledge : It's seen in '*Pottalkad*' (Moist deciduous forest), and '*Pachakkadu*' (Evergreen Forest).

Other information : Fruits are eaten by birds.

42. Scientific name : ***Monoon coffeoides* (Thwaites ex Hook. f. & Thomson) B. Xue & R. M. K. Saunders**

Terminology of *Kadar* : '*Nedunaru*'

Ethnomedicinal knowledge : Nil

Ethnoeconomical knowledge : Nil

Ethniclivelihood knowledge : Bark used as rope

Ethnoecological knowledge : It's seen in '*Pottalkad*' (Moist deciduous forest), and '*Pachakkadu*' (Evergreen Forest).

Other information : Fruits food for monkeys and birds.

43. Scientific name : ***Monoon fragrans* (Dalzell) B. Xue & R. M. K. Saunders**

Terminology of *Kadar* : '*Nedunaru*'

Ethnomedicinal knowledge : Nil

Ethnoeconomical knowledge : Nil

Ethniclivelihood knowledge : Bark used as rope

Ethnoecological knowledge : It's seen in '*Pottalkad*' (Moist deciduous forest), and '*Pachakkadu*' (Evergreen Forest).

Other information : Leaves are aromatic

## **Apiaceae**

44. Scientific name : ***Centella asiatica* (L.) Urb.**

Terminology of *Kadar* : '*Vallaraaadak*' / '*Kudukkanadaaku*'

Ethnomedicinal knowledge : Used for urinary diseases and bronchitis

Ethnoeconomical knowledge : Nil

Ethniclivelihood knowledge : Used as leafy vegetable  
 Ethnoecological knowledge : Seen in rivulets, streams and wet areas in the forest.  
 Other information : Nil

45. Scientific name : ***Eryngium foetidum L.***  
 Terminology of *Kadar* : 'Aanamalli'  
 Ethnomedicinal knowledge : Nil  
 Ethnoeconomical knowledge : Nil  
 Ethniclivelihood knowledge : Used in Cooked foods instead of coriander leaves  
 Ethnoecological knowledge : Seen in waste land near to the village.  
 Other information : It's an aromatic plant.

46. Scientific name : ***Peucedanum anamallayense C. B. Clarke***  
 Terminology of *Kadar* : 'Kuntilamalli'  
 Ethnomedicinal knowledge : Seed used against snake bite  
 Ethnoeconomical knowledge : Nil  
 Ethniclivelihood knowledge : Planted near to hut.  
 Ethnoecological knowledge : Seen in road sides of the '*Pottalkad*' (Moist deciduous forest), '*Pural*' (Open rocky area), and '*Velinkaadu*' (Dry deciduouse forest). The seeds are dispersed through wind.  
 Other information : The *Kadar* collect the seeds from '*Velinkaadu*' (Dry deciduouse forest) and rocky areas.

### **Apocynaceae**

47. Scientific name : ***Alstonia scholaris (L.) R. Br.***  
 Terminology of *Kadar* : '*Ezhilumpalam*' / '*Paala*'  
 Ethnomedicinal knowledge : Latex used against migraine.  
 Ethnoeconomical knowledge : Nil

Ethniclivelihood knowledge : Nil

Ethnoecological knowledge : Seen in '*Pachakkadu*' (Evergreen Forest). Flowering is before honey season.

Other information : The tree considered as '*Peyimaram*' (evil domiciling tree.)

48. Scientific name : ***Calotropis gigantea* (L.) W. T. Aiton**

Terminology of *Kadar* : '*Erukkila*'

Ethnomedicinal knowledge : Latex used against skin allergy and itching.

Ethnoeconomical knowledge : Nil

Ethniclivelihood knowledge : Nil

Ethnoecological knowledge : Seen in road sides of the '*Pottalkad*' (Moist deciduous forest), '*Pural*' (Open rocky area), and '*Velinkaadu*' (Dry deciduous forest).

Other information : Leaves are used in the funeral ceremony of *Kadar*.

49. Scientific name : ***Decalepis hamiltonii* Wight & Arn.**

Terminology of *Kadar* : '*Magaalikizhangu*'

Ethnomedicinal knowledge : It is a medicine for indigestion.

Ethnoeconomical knowledge : MFP

Ethniclivelihood knowledge : Tuber used to make pickle.

Ethnoecological knowledge : It seen in '*paarakuntu*' (Rocky hill).

Other information : A climber ('*Kodi*').

50. Scientific name : ***Hemidesmus indicus* (L.) R. Br.**

Terminology of *Kadar* : '*Nannaniveru*'

Ethnomedicinal knowledge : Nil

Ethnoeconomical knowledge : It is an MFP.

Ethniclivelihood knowledge : Tuber used for drinking purpose.

Ethnoecological knowledge : It is distributed in '*Velinkaadu*' (Dry deciduouse forest), plantations.

Other information : A climber ('*Kodi*').

51. Scientific name : ***Holarrhena pubescens* Wall. ex G. Don**

Terminology of *Kadar* : '*Karulapaala*'

Ethnomedicinal knowledge : Nil

Ethnoeconomical knowledge : Nil

Ethniclivelihood knowledge : Nil

Ethnoecological knowledge : It is distributed in '*Velinkaadu*' (Dry deciduouse forest).

Other information : A climber ('*Kodi*').

52. Scientific name : ***Gymnema inodorum* (Lour.) Decne.**

Terminology of *Kadar* : '*Peenarikodi*'

Ethnomedicinal knowledge : Nil

Ethnoeconomical knowledge : Nil

Ethniclivelihood knowledge : Nil

Ethnoecological knowledge : It seen '*Pachakkad*' (Evergreen forest).

Other information : A climber ('*Kodi*').

.

53. Scientific name : ***Pergularia daemia* (Forssk.) Chiov.**

Terminology of *Kadar* : '*Velipparuthi*'

Ethnomedicinal knowledge : Whole plant used for fertility.

Ethnoeconomical knowledge : Nil

Ethniclivelihood knowledge : Nil

Ethnoecological knowledge : Seen in '*Pural*' (Open rocky area), and '*Velinkaadu*' (Dry deciduouse forest).

Other information : Nil.

54. Scientific name : ***Rauvolfia serpentina* (L.) Benth. ex Kurz**

Terminology of *Kadar* : 'Avalpori', 'Eyakundan'

Ethnomedicinal knowledge : Root are used against headache, snake bite and diarrhoea.

Ethnoeconomical knowledge : Nil

Ethniclivelihood knowledge : Nil

Ethnoecological knowledge : It seen in 'Peradaavi' (Rainforest).

Other information : Nil.

55. Scientific name : ***Wrightia tinctoria* (Roxb.) R. Br.**

Terminology of *Kadar* : 'Dhandhapaala', 'Thondapaala', 'Nelampaala'

Ethnomedicinal knowledge : Tender leaves used against toothache, dandruff and scabies.

Ethnoeconomical knowledge : Nil

Ethniclivelihood knowledge : The plant wood used for making *Kulumbu* (a musical instrument)

Ethnoecological knowledge : Seen in *Velinkaadu* (Dry deciduous forest), *Pottalkaadu* (Moist deciduous forest).

Other information : Nil

### **Araceae**

57. Scientific name : ***Amorphophallus commutatus* (Schott) Engl.**

Terminology of *Kadar* : 'Kattuchena', 'Kattuchenayadaaku'

Ethnomedicinal knowledge : Nil

Ethnoeconomical knowledge : Nil

Ethniclivelihood knowledge : Tender leaves and rhizome are edible. Tender leaves used to make curry and chutney. Rhizome is also used for curry.

Ethnoecological knowledge : Seen in the side of streams and wet areas in '*Adaavi*' (Rainforest)

Other information : Nil

59.Scientific name : ***Amorphophallus paeoniifolius* (Dennst.) Nicolson**

Terminology of *Kadar* : '*Kattuchena*', '*Kattuchenayadaaku*'

Ethnomedicinal knowledge : Used for piles

Ethnoeconomical knowledge : Nil

Ethniclivelihood knowledge : Tender leaves used to make curry and chutney. Rhizome is also used for curry.

Ethnoecological knowledge : Seen in the side of streams and wet areas in '*Adaavi*' (Rainforest)

Other information : Nil

60.Scientific name : ***Anaphyllum wightii* Schott.**

Terminology of *Kadar* : '*Keerichena*'

Ethnomedicinal knowledge : Used for piles and snake bite.

Ethnoeconomical knowledge : Nil

Ethniclivelihood knowledge : Tender leaves used to make curry and chutney. Rhizome is also used for curry.

Ethnoecological knowledge : Seen in the side of streams and wet areas in '*Adaavi*' (Rainforest)

Other information : Mongoose eats its rhizome to cure the snake bite.

61.Scientific name : ***Arisaema tortuosum* (Wall.) Schott**

Terminology of *Kadar* : '*Naagaanthi*', '*Naagaraanthi*'



Ethnomedicinal knowledge : Medicine for elephants to gastric lavage.

Ethnoeconomical knowledge : It's an MFP

Ethniclivelihood knowledge : Tender leaves used to make curry and chutney.  
Rhizome is also used for curry.

Ethnoecological knowledge : Seen in the side of streams and wet areas in '*Adaavi*' (Rainforest)

Other information : They collect it for Ayurvedic medicine companies like Oushadhi and Kottakkal Arya VaidhyaSaala

63.Scientific name : ***Colocasia esculenta* (L.) Schott.**

Terminology of *Kadar* : '*Chembaadaak*' / '*Chembukilangu*'

Ethnomedicinal knowledge : Nil

Ethnoeconomical knowledge : Nil

Ethniclivelihood knowledge : Whole plant parts like shoot, leaves, rhizome are used for cooking and ripened fruits are eaten

Ethnoecological knowledge : Seen in '*Pathaal*' (Marshy grass land), and side of '*Chaal*' (rivulet) or '*Thodu*' (stream). Ripened fruits are eaten by birds.

Other information : Nil

64.Scientific name : ***Rhaphidophora pertusa* (Roxb.) Schott.**

Terminology of *Kadar* : '*Marachembu*'

Ethnomedicinal knowledge : stem used for ear ache.

Ethnoeconomical knowledge : Nil

Ethniclivelihood knowledge : Nil

Ethnoecological knowledge : Seen in '*Kariyadaavi*' (Southern montane wet temperate forest) '*Peradaavi*' (Rainforest).

Other information : Nil

### **Araliaceae**

Scientific name	:	<b><i>Hydrocotyle javanica</i> Thunb.</b>
Terminology of <i>Kadar</i>	:	' <i>Kaamaalachappu</i> '
Ethnomedicinal knowledge	:	Whole plant used against Jaundice
Ethnoeconomical knowledge	:	Nil
Ethniclivelihood knowledge	:	Nil
Ethnoecological knowledge	:	Seen in wet areas, rivulets, streams and wet areas in the forest.
Other information	:	Nil

### **Arecaceae**

65.Scientific name	:	<b><i>Areca catechu</i> L.</b>
Terminology of <i>Kadar</i>	:	' <i>Paakkaram</i> '
Ethnomedicinal knowledge	:	Young fruit used for spider venom
Ethnoeconomical knowledge	:	Nil
Ethniclivelihood knowledge	:	Seeds are an element of mixture for mastication.
Ethnoecological knowledge	:	Cultivating in settlements.
Other information	:	Nil

66.Scientific name	:	<b><i>Arenga wightii</i> Griff.</b>
Terminology of <i>Kadar</i>	:	' <i>Pana</i> '
Ethnomedicinal knowledge	:	The tomentum in the peduncle of leaves used for wound healing.
Ethnoeconomical knowledge	:	Nil
Ethniclivelihood knowledge	:	The tender shoot is eaten. Inflorescence is used to make toddy.
Ethnoecological knowledge	:	Seen in ' <i>Kariyadaavi</i> ' (Southern montane wet temperate forest), side of ' <i>Thodu</i> ' (stream) and ' <i>Kuth</i> ' (waterfall).
Other information	:	Nil

67. Scientific name : ***Calamus hookerianus* Becc.**  
Terminology of *Kadar* : '*Vallichooral*'  
Ethnomedicinal knowledge : Nil  
Ethnoeconomical knowledge : Nil  
Ethniclivelihood knowledge : Ripened fruits are eaten.  
Ethnoecological knowledge : Seen in '*Pachakaadu*' (Evergreen Forest).  
Other information : A climber ('*Kodi*')

68. Scientific name : ***Calamus thwaitesii* Becc.**  
Terminology of *Kadar* : '*Ponthichooral*'  
Ethnomedicinal knowledge : Nil  
Ethnoeconomical knowledge : Nil  
Ethniclivelihood knowledge : Ripened fruits are eaten. The *Kadar* use this plant to lull the thirst in the forest in summer. Stem is used for making digging stick '*Paarakolu*'.  
Ethnoecological knowledge : Seen in '*Pachakaadu*' (Evergreen forest).  
Other information : A climber ('*Kodi*'). The mature stem contains a lot of water. When cutting the part of the stem the two opposite sides cut off simultaneous. Because, when we cut only one side, the water flow may upward.

69. Scientific name : ***Caryota urens* L.**  
Terminology of *Kadar* : '*Pana*'  
Ethnomedicinal knowledge : The root is used for headache.  
Ethnoeconomical knowledge : Nil  
Ethniclivelihood knowledge : Flour from the stem is used to make pudding and appam. Peduncle of leaves used as cord or rope. Fruits are used as herbal fish-stupefying agent.  
Ethnoecological knowledge : Seen in '*Kariyadaavi*' (Southern montane wet temperate forest) '*Peradaavi*' (Rainforest) and also in the side of '*Pathal*' (Marshy grassland).

Other information : The *Kadar* determines a palm is matured when it flowers six or seven times.

70. Scientific name : ***Cocos nucifera* L.**

Terminology of *Kadar* : '*Thengamaram*' / '*Thengu*'

Ethnomedicinal knowledge : Nil

Ethnoeconomical knowledge : Nil

Ethniclivelihood knowledge : Fruit is used for cooking. Leaflet midrib used for making broom.

Ethnoecological knowledge : Cultivating in settlements.

Other information : Nil

71. Scientific name : ***Phoenix loureiroi* Kunth**

Terminology of *Kadar* : '*Cheevan*'

Ethnomedicinal knowledge : Nil

Ethnoeconomical knowledge : Nil

Ethniclivelihood knowledge : Row tender shoot are eaten

Ethnoecological knowledge : Seen in '*Pachakkaadu*' (Evergreen Forest)

Other information : Nil

72. Scientific name : ***Pinanga dicksonii* (Roxb.) Blume**

Terminology of *Kadar* : '*Kaattupaakkumaram*'

Ethnomedicinal knowledge : Nil

Ethnoeconomical knowledge : Nil

Ethniclivelihood knowledge : Row tender shoot are eaten

Ethnoecological knowledge : Distributed in '*Pathaal*' (Marshy grassland)

Other information : Nil.

### **Aristolochiaceae**

73. Scientific name : ***Aristolochia indica* L.**  
Terminology of *Kadar* : '*Pavattathettam*'  
Ethnomedicinal knowledge : The tuber is used against stomach pain.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Seen in '*Pachakkaadu*' (Evergreen Forest)  
Other information : They believe that the bark of the plant kept around the huts would keep away the snakes and other harmful creatures. It is a '*kodi*' (Climber).

74. Scientific name : ***Thottea siliquosa* (Lam.) Ding Hou**  
Terminology of *Kadar* : '*Alpam*'  
Ethnomedicinal knowledge : Leaves are used to cure wound healing. Roots are an ingredient of the medicine for snake bite.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Seen in '*Pachakkaadu*' (Evergreen Forest).  
Other information : Nil.

### **Asparagaceae**

75. Scientific name : ***Asparagus racemosus* Willd.**  
Terminology of *Kadar* : '*Vilpirithi*'  
Ethnomedicinal knowledge : Medicine for leucorrhoea.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Tuber used for pickle.  
Ethnoecological knowledge : It seen shady areas.  
Other information : Nil.

### **Asteraceae**

76. Scientific name : ***Acmella calva* (DC.) R. K. Jansen**
- Terminology of *Kadar* : '*Palluvedanachedi*'
- Ethnomedicinal knowledge : Flowers are medicine for tooth ache.
- Ethnoeconomical knowledge : Nil.
- Ethniclivelihood knowledge : Nil.
- Ethnoecological knowledge : It is found in near to the hamlet and roadsides.
- Other information : Nil.
- 
77. Scientific name : ***Ageratum conyzoides* L.**
- Terminology of *Kadar* : '*Appachappa*'
- Ethnomedicinal knowledge : Leaves used for wound healing.
- Ethnoeconomical knowledge : Nil.
- Ethniclivelihood knowledge : Nil.
- Ethnoecological knowledge : Its growth in dirty areas.
- Other information : Nil.
- 
78. Scientific name : ***Chromolaena odorata* (L.) R. M. King & H. Rob.**
- Terminology of *Kadar* : '*Chandan*'
- Ethnomedicinal knowledge : Nil.
- Ethnoeconomical knowledge : Nil.
- Ethniclivelihood knowledge : Nil.
- Ethnoecological knowledge : It is a weed, seen everywhere.
- Other information : The name of a place *Chandanthodu* is comes from the name of this plant. The '*Chandanthodu*' means the stream ('*Thodu*') with an abundance of *Chromolaena odorata* ('*Chandan*'). There is a bank of a stream with the presence of this plant on that place. Their ancestors said that the plant came in this area when the Anamalai road construction time. It is recently spread out in the areas.
- 
79. Scientific name : ***Strobocalyx arborea* (Buch.-Ham.) Sch. Bip.**

Terminology of <i>Kadar</i>	:	<i>'Vettilakarinta'</i>
Ethnomedicinal knowledge	:	The use of tender leaves will control sex hormone in men.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Nil.
Ethnoecological knowledge	:	It is seen in ' <i>Pachakaadu</i> ' (Evergreen Forest). Flowering in December-March, before honey season.
Other information	:	The honey is blackish colour at that time of flowering.

80. Scientific name	:	<b><i>Cyanthillium cinereum</i></b>
Terminology of <i>Kadar</i>	:	<i>'Pavukuruna'</i>
Ethnomedicinal knowledge	:	Nil
Ethnoeconomical knowledge	:	Nil
Ethniclivelihood knowledge	:	Nil
Ethnic knowledge	:	Medicine, whole plant used for wound healing
Ethnoecological knowledge	:	It is seen on the sides of the roads and the wet places.
Other information	:	Nil.

### **Begoniaceae**

81. Scientific name	:	<b><i>Begonia floccifera</i> Bedd.</b>
Terminology of <i>Kadar</i>	:	<i>'Kalraangi'</i>
Ethnomedicinal knowledge	:	Nil
Ethnoeconomical knowledge	:	Nil
Ethniclivelihood knowledge	:	Nil
Ethnoecological knowledge	:	Seen in rocks. Flowering in ' <i>Variyakkalam</i> ' (South-West Monsoon) and ' <i>Kongamaya</i> ' kalam (North – East Monsoon)
Other information	:	Nil.

### **Bignoniaceae**



82.Scientific name	:	<b><i>Stereospermum colais</i> (Buch. -Ham. ex Dillw.) D. L. Mabberley</b>
Terminology of <i>Kadar</i>	:	' <i>Paathiri</i> '
Ethnomedicinal knowledge	:	Nil
Ethnoeconomical knowledge	:	Nil
Ethniclivelihood knowledge	:	Nil
Ethnic knowledge	:	It is used as MFP
Ethnoecological knowledge	:	It is seen in ' <i>pottalkaadu</i> ' (Moist deciduous forest) and in the boundary of ' <i>pachakaadu</i> ' (Evergreen Forest). Flowering in honey season (March last to June)
Other information	:	Seeds are distributed around the mother plant and other areas of the forest to next generation.

### **Boraginaceae**

83.Scientific name	:	<b><i>Cordia obliqua</i> Willd.</b>
Terminology of <i>Kadar</i>	:	' <i>Thumbapazham</i> '
Ethnomedicinal knowledge	:	Nil
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Ripened fruits are eaten.
Ethnoecological knowledge	:	This species is seen in the ' <i>Velinkaadu</i> ' (Dry deciduous forest) and also in the plains. Flowering in honey season (March to June)
Other information	:	Nil.

84.Scientific name	:	<b><i>Cordia dichotoma</i> G. Forst.</b>
Terminology of <i>Kadar</i>	:	' <i>Viri</i> '
Ethnomedicinal knowledge	:	Nil
Ethnoeconomical knowledge	:	Nil
Ethniclivelihood knowledge	:	Ripened fruits are eaten.
Ethnoecological knowledge	:	It is seen on the ' <i>Pottalkaadu</i> ' (Moist deciduous forest).
Other information	:	Nil.

85. Scientific name	:	<b><i>Ehretia aquatica</i> (Lour.) Gottschling &amp; Hilger</b>
Terminology of <i>Kadar</i>	:	' <i>Kallurvachi</i> ', ' <i>Vettilavanchi</i> '.
Ethnomedicinal knowledge	:	Medicine for urinary tract infection, kidney stone and asthma.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Whole plant used for drinking purpose. Leaves are an element of mixture for mastication.
Ethnoecological knowledge	:	See in rocky areas near to the river.
Other information	:	Nil.

### **Burseraceae**

86. Scientific name	:	<b><i>Canarium strictum</i> Roxb.</b>
Terminology of <i>Kadar</i>	:	' <i>Kannaadithelli</i> ', ' <i>Thelli</i> ', ' <i>Thellipayin</i> '
Ethnomedicinal knowledge	:	Nil.
Ethnoeconomical knowledge	:	Resin is an MFP
Ethniclivelihood knowledge	:	Resin is used to incense and used as an insect repellent.
Ethnoecological knowledge	:	Fruits are eaten by hornbills.
Other information	:	Fumigation of resin is a part of all ceremony. The collection process of ' <i>Thelli</i> ' is in four steps. First, they mark the tree. After that, they remove a small portion of the trunk and the bark with the ' <i>Kombukathi</i> '. They will show the fire on the cutting mark. The ' <i>Thelli</i> ' will be ready for collection on next day. The name of the sacred place ' <i>Thellikal</i> ' comes from the presence of ' <i>Thelli</i> ' trees in that area. Hornbills are the seed-dispersing agent.

### **Cactaceae**

87. Scientific name	:	<b><i>Opuntia dillenii</i> (Ker Gawl.) Haw.</b>
Terminology of <i>Kadar</i>	:	' <i>Mullukallipazham</i> '

Ethnomedicinal knowledge	:	Nil.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Ripened fruits are eaten.
Ethnoecological knowledge	:	Distributed in ' <i>Velinkkad</i> ' (Dry deciduous Forest)
Other information	:	Nil.

### **Calophyllaceae**

88.Scientific name	:	<b><i>Calophyllum polyanthum</i> L.</b>
Terminology of <i>Kadar</i>	:	' <i>Punnapain</i> '
Ethnomedicinal knowledge	:	Nil.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Nil.
Ethnoecological knowledge	:	It seen in ' <i>Adaavi</i> ' (Rainfoest) and ' <i>Cholakkaadu</i> ' (Shola foest). It is a nesting tree of hornbill.
Other information	:	Monkeys, hornbills, and other birds are the seed dispersal agents.

89.Scientific name	:	<b><i>Mesua ferrea</i> L.</b>
Terminology of <i>Kadar</i>	:	' <i>Naavu</i> ', ' <i>Naangu</i> '
Ethnomedicinal knowledge	:	Nil.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Ripened fruits are eaten. The wood is used to make ' <i>Paarakolu</i> ' (digging stick).The wood is used in hut making.
Ethnoecological knowledge	:	Distributed in ' <i>Pachakkad</i> ' (Evergreen Forest) and ' <i>Adaavi</i> ' (Rainforest), Flowering time is in ' <i>Vedakaalam</i> ' (summer season).
Other information	:	The shape of the leaves is like a tongue (' <i>Naavu</i> ') so they are called ' <i>Naavu</i> '. It is one of the Hornbill nesting tree.
90.Scientific name	:	<b><i>Mesua thwaitesii</i> Planch. &amp; Triana</b>

Terminology of <i>Kadar</i>	:	' <i>Churangunaavu</i> ', ' <i>Karimchuruli</i> '
Ethnomedicinal knowledge	:	They roast the seed in a pan to extract the oil from it for daubing on the wound.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Nil.
Ethnoecological knowledge	:	Distributed in ' <i>Pachakkad</i> ' (Evergreen Forest) and ' <i>Adaavi</i> ' (Rainforest).
Other information	:	Nil.

### **Campanulaceae**

91. Scientific name	:	<b><i>Lobelia nicotianifolia</i> Roth</b>
Terminology of <i>Kadar</i>	:	' <i>Kattupukayila</i> '
Ethnomedicinal knowledge	:	Nil.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Dried leaves used for mastication.
Ethnoecological knowledge	:	It's seen in open places of ' <i>Pachakkad</i> ' (Evergreen Forest) and in the high-altitude areas of evergreen hills. Flowering during in ' <i>Kulirkalam</i> ' (winter season) up to the starting of ' <i>Vedakalam</i> ' (summer season).
Other information	:	<i>Kadars</i> dry the slaked lime (Calcium hydroxide) smeared leaves by exposing them to sunshine.

### **Cannabaceae**

92. Scientific name	:	<b><i>Trema orientale</i> (L.) Blume</b>
Terminology of <i>Kadar</i>	:	' <i>Amaithalinaaru</i> '
Ethnomedicinal knowledge	:	Nil.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Bark is used as fiber.
Ethnoecological knowledge	:	Distributed in ' <i>Velinkkad</i> ' (Dry deciduous Forest)
Other information	:	Nil.

### **Capparaceae**

93. Scientific name : ***Capparis moonii* Wight**  
Terminology of *Kadar* : 'Arinjirakodi'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Seen in 'Aatorathadaavi' (Riparian forest).  
Other information : Nil.

94. Scientific name : ***Capparis rheedii***  
Terminology of *Kadar* : 'Chavrukka'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Seen in 'Aatorathadaavi' (Riparian forest).  
Other information : Nil.

95. Scientific name : ***Capparis zeylanica* L.**  
Terminology of *Kadar* : 'Karinthottivalli'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Seen in 'Aatorathadaavi' (Riparian forest).  
Other information : Nil.

### **Caricaceae**

96. Scientific name	:	<b><i>Carica papaya</i> L</b>
Terminology of <i>Kadar</i>	:	' <i>Veppasi</i> '
Ethnomedicinal knowledge	:	Juice made from tender leaves of ' <i>Veppaasi</i> ' is used for the abortion and for releasing of placenta.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Ripened fruits are eaten. Tender fruits used to cook.
Ethnoecological knowledge	:	Cultivated in ' <i>Cheri</i> ' (village).
Other information	:	Nil.

### **Celastraceae**

97. Scientific name	:	<b><i>Lophopetalum wightianum</i> Arn.</b>
Terminology of <i>Kadar</i>	:	' <i>Venkotta</i> '
Ethnomedicinal knowledge	:	Nil.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Nil.
Ethnoecological knowledge	:	Distributed in ' <i>Pachakkad</i> ' (evergreen forest).
Other information	:	Nil.

### **Clusiaceae**

98. Scientific name	:	<b><i>Garcinia gummi-gutta</i> (L.) Roxb.</b>
Terminology of <i>Kadar</i>	:	' <i>Puliyotta</i> '
Ethnomedicinal knowledge	:	Fruits are used by women after delivery for cleaning womb.
Ethnoeconomical knowledge	:	The pericarp of fruit is used as MFP.
Ethniclivelihood knowledge	:	Ripened fruit are eaten.
Ethnoecological knowledge	:	Distributed in ' <i>Adaavi</i> ', ' <i>Pachakkaadu</i> ' and along stream banks. May is the flowering time of this plant. The seed viability is very poor.

Other information : The *Kadar* plant the seeds with the help of '*Paarakolu*' (digging stick). Before planting the seeds will coat with ash.

### **Combretaceae**

99. Scientific name : ***Getonia floribunda* Roxb.**

Terminology of *Kadar* : '*Pullaanikodi*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : The *Kadar* use this plant to lull the thirst in the forest in summer.

Ethnoecological knowledge : Distributed in '*Velikkad*'. It flowers in summer ('*Vedakaalam*').

Other information : The mature stem contains a lot of water. When cutting the part of the stem the two opposite sides cut off simultaneous. Because, when we cut only one side, the water flow may upward.

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100. Scientific name : ***Terminalia bellirica* (Gaertn.) Roxb.**

Terminology of *Kadar* : '*Thanni*'

Ethnomedicinal knowledge : Inner bark is an ingredient in the medicine for jaundice, allergy, stomach ache and restarting fertility.

Ethnoeconomical knowledge : Fruit is used as MFP.

Ethniclivelihood knowledge : Nil.

Ethnoecological knowledge : It flowers in summer ('*Vedakaalam*').

Other information : Nil.

101. Scientific name : ***Terminalia chebula* Retz.**

Terminology of *Kadar* : '*Kadukka*'

Ethnomedicinal knowledge : Used for cough and cold.

Ethnoeconomical knowledge : Fruit used as an MFP.

Ethniclivelihood knowledge : Fruit is an ingredient in arrack.



Ethnoecological knowledge : It flowers in summer ('Vedakaalam').  
Other information : Nil.

102. Scientific name : ***Terminalia paniculata* Roth.**  
Terminology of *Kadar* : 'Pillamaruthu'  
Ethnomedicinal knowledge : Bark is used as a medicine for chest pain, body pain, back pain and stomach ache.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Large tree, distributed in rocky areas in the moist deciduous forest. It flowers in summer ('Vedakaalam').  
Other information : Nil.

### **Convolvulaceae**

103. Scientific name : ***Argyreia nervosa* (Burm. fil.) Bojer**  
Terminology of *Kadar* : 'Onkattapazham'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Ripened fruits are eaten.  
Ethnoecological knowledge : Distributed near to hamlet.  
Other information : Nil.

### **Cornaceae**

104. Scientific name : ***Alangium salviifolium* (L. f.) Wangerin**  
Terminology of *Kadar* : 'Elanji'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Used as firewood.

Ethnoecological knowledge : Seed dispersal through birds, Squirrels, rodents, etc.  
Other information : Nil.

105. Scientific name : ***Mastixia arborea* (Wight) C. B. Clarke**  
Terminology of *Kadar* : '*Mattipal*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Resin is used to fumigate.  
Ethnoecological knowledge : Seed dispersal through birds.  
Other information : The resin has an aromatic smell.

### **Cucurbitaceae**

106. Scientific name : ***Citrullus colocynthis* (L.) Schrad.**  
Terminology of *Kadar* : '*Karuvilkai*'  
Ethnomedicinal knowledge : Eats fruits for removing tobacco stains from inner organs.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : A climber.  
Other information : The fruits are the food for sambar deer, spotted deer, barking deer, and mouse deer.

107. Scientific name : ***Luffa acutangula* (L.) Roxb.**  
Terminology of *Kadar* : '*Peaikinkayi*', '*Peekinkayi*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Fruits are used for bathing as brush.  
Ethnoecological knowledge : A climber ('*Kodi*').

Other information : Nil.

108. Scientific name : ***Cucumis melo L.***

Terminology of *Kadar* : '*Peekinkayi*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : The dried fruit is a natural body scrubber.

Ethnoecological knowledge : A climber ('*Kodi*').

Other information : Nil.

109. Scientific name : ***Momordica dioica Roxb. ex Willd.***

Terminology of *Kadar* : '*Kattupaval*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Tender fruits are used as vegetable.

Ethnoecological knowledge : A climber.

Other information : The fruits are the food for sambar deer, spotted deer, barking deer, and mouse deer.

### **Cyperaceae**

110. Scientific name : ***Cyperus rotundus L.***

Terminology of *Kadar* : '*Muthanga*'

Ethnomedicinal knowledge : Tubers are used as a medicine to cure helminth infection in babies.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Nil.

Ethnoecological knowledge : Found in '*Pathaal*' (Marshy grasslands) and '*Pural*' (Open rocky area), '*Paadam*' (Wet grassland)

Other information : Nil.

111. Scientific name : ***Eleusine coracana* (L.) Gaertn.**

Terminology of *Kadar* : 'Kora'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Seeds are used as grains for food purpose. Dried grass used to make traditional bed.

Ethnoecological knowledge : Found in '*Pathaal*' (Marshy grasslands)

Other information : Nil.

### **Dilleniaceae**

112. Scientific name : ***Dillenia pentagyna* Roxb.**

Terminology of *Kadar* : '*Punna*'/ '*Vazhapunna*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Fruits are used as a herbal fish-stupefying agent.

Ethnoecological knowledge : It is distributed in '*Pachakkad*' (Eergreen forest).

Other information : Fruits are eaten by birds.

### **Dioscoreaceae**

113. Scientific name : ***Dioscorea alata* L.**

Terminology of *Kadar* : '*Nerathettam*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Cooked or roasted tubers are eaten.

Ethnoecological knowledge : It is a '*Kodi*' (climber)

Other information : Nil.

114. Scientific name : ***Dioscorea bulbifera* L.**  
Terminology of *Kadar* : '*Karrikki*', '*Chavalu*'  
Ethnomedicinal knowledge : Tubers are medicine against stomach pain.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Tubers are a staple food. Before cooking it is kept in running water for one night to remove the poisonous effect.  
Ethnoecological knowledge : It is distributed in everywhere.  
Other information : It has a poisonous effect.

115. Scientific name : ***Dioscorea hispida* Dennst.**  
Terminology of *Kadar* : '*Thalithettam*', '*Vennithettam*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Cooked or roasted tubers are eaten.  
Ethnoecological knowledge : It seen in '*Pachakkaadu*' (Evergreen forest)  
Other information : Nil.

116. Scientific name : ***Dioscorea intermedia* Thw.**  
Terminology of *Kadar* : '*Chekavan*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Cooked or roasted tubers are eaten.  
Ethnoecological knowledge : It seen in '*Pachakkaadu*' (Evergreen forest) & '*Adaavi*' (Rainforest).  
Other information : Nil.

117. Scientific name : ***Dioscorea oppositifolia* L.**  
Terminology of *Kadar* : '*Irathettam*', '*Kaanjalu*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Cooked or roasted tubers are eaten.  
Ethnoecological knowledge : It seen in '*Pachakkaadu*' (Evergreen forest)  
& '*Velinkaadu*' (Dry deciduous forest)  
Other information : Nil.

118. Scientific name : ***Dioscorea pentaphylla* L**  
Terminology of *Kadar* : '*Choriyanthettam*' / '*Noottathettam*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Cooked or roasted tubers are eaten.  
Ethnoecological knowledge : It is distributed in '*Pachakkaadu*' (Evergreen forest)  
Other information : Nil.

119. Scientific name : ***Dioscorea spicata* B. Heyne ex Roth**  
Terminology of *Kadar* : '*Vettilathettam*' / '*Vettilakodithettam*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Cooked or roasted tubers are eaten.  
Ethnoecological knowledge : It seen in '*Pachakkaadu*' (Evergreen forest)  
Other information : Nil.

120. Scientific name : ***Dioscorea tomentosa* J. Koenig ex Spreng.**  
Terminology of *Kadar* : '*Shjeluthettam*' / '*Chelthettam*'

Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Cooked or roasted tubers are eaten.  
Ethnoecological knowledge : It seen in rocky areas.  
Other information : Nil.

121. Scientific name : ***Dioscorea wallichii* Hook. f.**  
Terminology of *Kadar* : '*Ayanam*' / '*Chandanathettam*' / '*Mayavalli*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Cooked or roasted tubers are eaten.  
Ethnoecological knowledge : It seen in '*Pachakkaadu*' (Evergreen forest)  
& '*Velinkaadu*' (Dry deciduous forest)  
Other information : Nil.

### **Dipterocarpaceae**

122. Scientific name : ***Dipterocarpus indicus* Bedd.**  
Terminology of *Kadar* : '*Kalpain*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Seen in '*Pachakkaad*' (Evergreen Forest) and '*Peradaavi*' (Rainforest).  
Other information : Nil.

123. Scientific name : ***Hopea parviflora* Bedd.**  
Terminology of *Kadar* : '*Thambakam*'  
Ethnomedicinal knowledge : Nil.



Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : Nil.  
 Ethnoecological knowledge : Seen in '*Pachakkaad*' (Evergreen Forest) and '*Peradaavi*' (Rainforest).  
 Other information : Nil.

124. Scientific name : ***Hopea ponga* (Dennst.) Mabb.**  
 Terminology of *Kadar* : '*Ponk*'  
 Ethnomedicinal knowledge : Nil.  
 Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : Nil.  
 Ethnoecological knowledge : Seen in '*Pachakkaad*' (Evergreen Forest) and '*Peradaavi*' (Rainforest).  
 Other information : Nil.

125. Scientific name : ***Vateria indica* L.**  
 Terminology of *Kadar* : '*Vellapayin*' / '*Undapayin*'  
 Ethnomedicinal knowledge : Nil.  
 Ethnoeconomical knowledge : Its resin is an MFP.  
 Ethnolivelihood knowledge : Resin is used to incense.  
 Ethnoecological knowledge : Seen in '*Pachakkaad*' (Evergreen Forest) and '*Peradaavi*' (Rainforest).  
 Other information : Fumigation of resin instead of *Canarium strictum* is a part of all ceremony.

### **Ebenaceae**

126. Scientific name : ***Diospyros assimilis* Bedd.**  
 Terminology of *Kadar* : '*Karinthali*'  
 Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : The wood is used to make '*Paarakolu*' (digging stick).  
Ethnoecological knowledge : Seen in '*Pachakkaad*' (Evergreen Forest) and river side.  
Other information : Nil.

127. Scientific name : ***Diospyros buxifolia* (Blume) Hiern**  
Terminology of *Kadar* : '*Karimthuvara*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : The wood is used to make '*Paarakolu*' (digging stick).  
Ethnoecological knowledge : Seen in '*Pachakkaad*' (Evergreen Forest)  
Other information : Nil.

128. Scientific name : ***Diospyros crumenata* Thwaites**  
Terminology of *Kadar* : '*Valla*' / '*Karimbudal*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : The wood is used to make '*Paarakolu*' (digging stick).  
Ethnoecological knowledge : Seen in '*Pachakkaad*' (Evergreen Forest)  
Other information : Nil.

129. Scientific name : ***Diospyros ebenum* J. Koenig ex Retz.**  
Terminology of *Kadar* : '*Karimaram*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : The wood is used to make '*Paarakolu*' (digging stick).  
Ethnoecological knowledge : Fruits are eaten by birds.

130. Scientific name : ***Diospyros melanoxylon Roxb.***  
Terminology of *Kadar* : '*Karimbvelli*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : The wood is used to make '*Paarakolu*' (digging stick).  
Ethnoecological knowledge : Seen in '*Pachakkaad*' (Evergreen Forest)  
Other information : Nil.

131. Scientific name : ***Diospyros montana Roxb***  
Terminology of *Kadar* : '*Manjakara*', '*Vakkanamaram*'  
Ethnomedicinal knowledge : Leaves are medicine for Rheumatism.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : The wood is used to make '*Paarakolu*' (digging stick).  
Ethnoecological knowledge : Seen in '*Pachakkaad*' (Evergreen Forest)  
Other information : Nil.

132. Scientific name : ***Diospyros nilagirica Bedd.***  
Terminology of *Kadar* : '*Karimcheru*' / '*Karimchora*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : The wood is used to make '*Paarakolu*' (digging stick).  
Ethnoecological knowledge : Seen in '*Pachakkaad*' (Evergreen Forest) and river side.  
Other information : Nil.

133. Scientific name : ***Diospyros paniculata Dalzell***  
Terminology of *Kadar* : '*Karivellala*' / '*Karivella*'  
Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : The wood is used to make '*Paarakolu*' (digging stick).  
Ethnoecological knowledge : Seen in '*Pachakkaad*' (Evergreen Forest) and riverside.  
Other information : Nil.

134. Scientific name : ***Diospyros sylvatica* Roxb.**  
Terminology of *Kadar* : '*Karimaram*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : The wood is used to make '*Paarakolu*' (digging stick).  
Ethnoecological knowledge : Seen in '*Pachakkaad*' (Evergreen Forest) and river side.  
Other information : Nil.  
Other information : Nil.

135. Scientific name : ***Diospyros thwaitesii* (Hiern) Bedd.**  
Terminology of *Kadar* : '*Karimaram*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : The wood is used to make '*Paarakolu*' (digging stick).  
Ethnoecological knowledge : Fruits are eaten by birds.  
Other information : Nil.

### **Elaeocarpaceae**

136. Scientific name : ***Elaeocarpus munronii* (Wl.) Masters**  
Terminology of *Kadar* : '*Kullanagara*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Ripened fruits are raw eaten.  
Ethnoecological knowledge : Seen in '*Pachakkaad*' (Evergreen Forest) and river side.  
Other information : Nil.

137. Scientific name : ***Elaeocarpus serratus* L.**  
Terminology of *Kadar* : Nagara  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Ripened fruits are raw eaten and used for making pickle.  
Ethnoecological knowledge : Seen in semi - evergreen forest and in the plains. Bats are the seed dispersal agents.  
Other information : Nil.

138. Scientific name : ***Elaeocarpus tuberculatus* Roxb.**  
Terminology of *Kadar* : '*Pauhmb*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : *Kadars* collect the seeds as MFP.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Bats are the seed dispersal agents. December is the flowering time of the plant.  
Other information : Seeds have spiritual importance in Hindu religion.

139. Scientific name : ***Elaeocarpus variabilis* Zmarzty**  
Terminology of *Kadar* : '*Kaippanagara*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.

Ethnoecological knowledge : The fruit have bitterness.  
Other information : The *Kadars* called '*Kaippanagara*' which means bitter elaeocarpus.

### **Erythropalaceae**

140. Scientific name : ***Erythropalum scandens* Bl.**  
Terminology of *Kadar* : '*Pulluvallikodi*'  
Ethnomedicinal knowledge : Medicine for ear ache and snake bite.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Climber, Seen in '*Pachakkaadu*' (Evergreen Forest) and '*Velinkaadu*' (Dry deciduous Forest).  
Other information : Nil.

### **Euphorbiaceae**

141. Scientific name : ***Acalypha fruticosa* Forssk.**  
Terminology of *Kadar* : '*Murithaali*'  
Ethnomedicinal knowledge : Leaves are medicine for wound healing.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Seen in everywhere.  
Other information : Nil.

142. Scientific name : ***Macaranga indica* Wight, Ic.**  
Terminology of *Kadar* : '*Thuyilmooki*', '*Vatakkanni*'  
Ethnomedicinal knowledge : Resin used for wound healing.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.

Ethnoecological knowledge : It flowers in summer ('*Vedakaalam*'). It's a small tree, seen in the border of the evergreen forest.

Other information : Nil.

143. Scientific name : ***Macaranga peltata* (Roxb.) Müll. Arg.**

Terminology of *Kadar* : '*Vatta*'

Ethnomedicinal knowledge : Bark is one of the components in the medicine for body pain, headache, toothache, and fever.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Nil.

Ethnoecological knowledge : It flowers in summer ('*Vedakaalam*'). It's a small tree, seen in the border of the evergreen forest.

Other information : Nil.

144. Scientific name : ***Mallotus philippensis* (Lam.) Müll. Arg.**

Terminology of *Kadar* : '*Sindooramaram*'

Ethnomedicinal knowledge : Leaves are medicine for wound healing.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Nil.

Ethnoecological knowledge : It's a small tree, seen in evergreen forest.

Other information : Nil.

145. Scientific name : ***Mallotus tetracoccus* (Roxb.) Kurz**

Terminology of *Kadar* : '*Vellala*' / '*Porivatta*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : The wood is used to make *Kottapidi* (hammer).

Ethnoecological knowledge : It's a small tree, seen in the border of the evergreen forest.



Other information : Nil.

146. Scientific name : ***Manihot esculenta* Crantz**

Terminology of *Kadar* : '*Poolakilangu*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Root tubers are edible.

Ethnoecological knowledge : Cultivated in hamlets

Other information : Nil.

### **Fabaceae**

147. Scientific name : ***Albizia procera* (Roxb.) Benth.**

Terminology of *Kadar* : '*Vella nama*', '*Vella vaaka*'

Ethnomedicinal knowledge : Bark is a medicine used for inflammation of whole body.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Nil.

Ethnoecological knowledge : Seen in '*Velinkkad*' (Dry deciduous forest).

Other information : Nil.

148. Scientific name : ***Bauhinia racemosa* Lam.**

Terminology of *Kadar* : '*Aarampuli*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Bark is used as rope for tie.

Ethnoecological knowledge : Seen in '*Velinkkad*' (Dry deciduous forest) and '*Pottelkkad*' (Moist deciduous forest).

Other information : Nil.

150. Scientific name : ***Cassia fistula* L.**  
Terminology of *Kadar* : '*Kontamaram*'  
Ethnomedicinal knowledge : Inducing sterility. Medicine for toothache, head ache and rheumatism.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Medium tree, seen in '*Velinkkad*' (Dry deciduous forest).  
Other information : When the time of thunder, keep away from the tree. The tree attracts thunder.

151. Scientific name : ***Crotalaria pallida* Aiton**  
Terminology of *Kadar* : '*Kiluki*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Seed is used as rodenticide  
Ethnoecological knowledge : Seeds are poisonous.  
Other information : Nil.

152. Scientific name : ***Dalbergia latifolia* Roxb.**  
Terminology of *Kadar* : '*Veetti*'  
Ethnomedicinal knowledge : The bark is medicine for inducing sterility. Also, it is a medicine for curing stomach aches.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Seen in '*Velinkkad*' (Dry deciduous forest)  
Other information : Nil.

153. Scientific name : ***Entada rheedii Spreng.***  
Terminology of *Kadar* : '*Theylakodi*'  
Ethnomedicinal knowledge : Against body and stomach pain, the cotyledons of the dried seed are eaten.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Woody climber, distributed in evergreen forest.  
Other information : Nil.

154. Scientific name : ***Erythrina subumbrans (Hassk.) Merr.***  
Terminology of *Kadar* : '*Murik*', '*Muringa*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Flowering in '*vedakkaalam*' (summer)  
Other information : *Kadars* never use the wood of *Erythrina* as firewood because of its irritating fumes and less heat.

155. Scientific name : ***Erythrina variegata L.***  
Terminology of *Kadar* : '*Mullumurik*' / '*Muringa*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Flowering in '*vedakkaalam*' (summer)  
Other information : *Kadars* never use the wood of *Erythrina* as firewood because of its irritating fumes and less heat.

149. Scientific name : ***Guilandina bonduc L.***

Terminology of *Kadar* : '*Kalanchi*', '*Chalinchi*'

Ethnomedicinal knowledge : Cotyledons, seeds are used for stomach-ache with Diarrhoea and piles. The fruits ground in to the milk(goat) and have it for cure blindness.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Nil.

Ethnoecological knowledge : It is a '*Kodi*' (Climber), Seen in '*Velinkkad*' (Dry deciduous forest).

Other information : Nil.

157. Scientific name : ***Mimosa pudica* L.**

Terminology of *Kadar* : '*Thottavaadi*' / '*Thottasukki*'

Ethnomedicinal knowledge : Leaves used as medicine against Rheumatic pain, wound, body pain and leg pain.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Nil.

Ethnoecological knowledge : Herb, distributed in '*Pachakkad*' (Evergreen forest). This plant is the sign of primary succession.

Other information : Nil.

158. Scientific name : ***Pongamia pinnata* (L.) Pierre**

Terminology of *Kadar* : '*Ungu*', '*Punku*'

Ethnomedicinal knowledge : Bark ground in to paste and smear to get releif from head ache. Boiled water with the bark is used to bath for body pain.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Nil.

Ethnoecological knowledge : Seen in '*Velinkaad*' (Dry deciduous forest) and road side

Other information : Nil.

156. Scientific name : ***Prioria pinnata (Roxb. ex DC.) Breteler***  
Terminology of *Kadar* : 'Ennapine'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Used as firewood.  
Ethnoecological knowledge : Oil produced by this tree. Seen in '*Pachakkaad*' (Evergreen forest). It will never grow in high elevation forests.  
Other information : Nil.

159. Scientific name : ***Pterocarpus marsupium Roxb.***  
Terminology of *Kadar* : 'Venga' / 'Benga' / 'Venga chora' / 'Venga pala'  
Ethnomedicinal knowledge : Bark is used to cure stomach ache with indigestion, rheumatic fever and body pain. Resin is used as a medicine to cure wound.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Resin is used as Kumkuma.  
Ethnoecological knowledge : It seen in '*Velinkaad*' (Dry deciduous forest).  
Other information : Nil.

160. Scientific name : ***Senegalia caesia (L.) Maslin, Seigler & Ebinger***  
Terminology of *Kadar* : 'Velleenga', 'Paaleenga'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : It is an MFP.  
Ethniclivelihood knowledge : Bark is used to bath instead of soap.  
Ethnoecological knowledge : Seen in '*Velinkaad*' (Dry deciduous forest)  
Other information : Nil.

161. Scientific name : ***Senegalia rugata (Lam.) Britton & Rose***  
Terminology of *Kadar* : 'Pulinchika', 'Pulichi'

Ethnomedicinal knowledge : Nil.  
 Ethnoeconomical knowledge : Fruit is used as MFP.  
 Ethnolivelihood knowledge : Fruits are used instead of soap and used as herbal fish-stupefying agent.  
 Ethnoecological knowledge : Fruits have light poisonous effect.  
 Other information : Nil.

162. Scientific name : ***Senegalia torta* (Roxb.) Maslin, Seigler & Ebinger**  
 Terminology of *Kadar* : '*Choppaneenga*'  
 Ethnomedicinal knowledge : Nil.  
 Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : Fruits are used as herbal fish-stupefying agent.  
 Ethnoecological knowledge : Fruits have light poisonous effect.  
 Other information : Nil.

163. Scientific name : ***Senna occidentalis* (L.)**  
 Terminology of *Kadar* : '*Kolthakara*'  
 Ethnomedicinal knowledge : Leaves are used as a medicine for rheumatism.  
 Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : Leaves used to make curry.  
 Ethnoecological knowledge : It seen road sides and '*Pathaal*' (Marshy grass lands area)  
 Other information : Nil.

164. Scientific name : ***Senna tora* (L.) Roxb.**  
 Terminology of *Kadar* : '*Thakaraadak*', '*Chakkarathakara*', '*Kummattithakarayadaaku*'  
 Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.  
 Ethnoliveliness knowledge : Leaves are used as leafy vegetable.  
 Ethnobotanical knowledge : It seen road sides, '*Pathaal*' (Marshy grass lands area) and '*Pural*' (Open rocky area)  
 Other information : Nil.

165. Scientific name : ***Sesbania grandiflora* (L.) Pers.**  
 Terminology of *Kadar* : '*Agathiaadaak*'  
 Ethnomedicinal knowledge : Nil.  
 Ethnoeconomical knowledge : Nil.  
 Ethnoliveliness knowledge : Leaves are used as leafy vegetable.  
 Ethnobotanical knowledge : It seen road sides and '*Pural*' (Open rocky area)  
 Other information : Nil.

166. Scientific name : ***Tamarindus indica* L.**  
 Terminology of *Kadar* : '*Puli*'  
 Ethnomedicinal knowledge : Nil.  
 Ethnoeconomical knowledge : Nil.  
 Ethnoliveliness knowledge : Fruits used in curry for sourness.  
 Ethnobotanical knowledge : It seen road sides and '*Pural*' (Open rocky area) and '*Velinkaad*' (Dry deciduous forest).  
 Other information : Nil.

167. Scientific name : ***Vigna vexillata* (L.) A. Rich.**  
 Terminology of *Kadar* : '*Avara*'  
 Ethnomedicinal knowledge : Nil.  
 Ethnoeconomical knowledge : Nil.  
 Ethnoliveliness knowledge : Leaves are used as leafy vegetable.



Ethnoecological knowledge : 'Velinkaad' (Dry deciduous forest)  
Other information : Nil.

168. Scientific name : ***Zornia gibbosa* Span.**  
Terminology of *Kadar* : 'Murikooti'  
Ethnomedicinal knowledge : Leaves are medicine against stomach pain and wounds.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Distributed in plains as well as degraded forest area.  
Other information : Nil.

### **Lamiaceae**

169. Scientific name : ***Ocimum americanum* L.**  
Terminology of *Kadar* : 'Kaattuthulasi'  
Ethnomedicinal knowledge : Leaves are used as medicine against cough and cold.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : It's a shrub, seen in deciduous forest and waste land  
Other information : Nil.

170. Scientific name : ***Tectona grandis* L. f.**  
Terminology of *Kadar* : 'Thekkumaram'  
Ethnomedicinal knowledge : Tender leaves used to cure wound.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Distributed in plantations.  
Other information : Nil.

## **Lauraceae**

171. Scientific name : ***Actinodaphne bourdillonii* Gamble**  
Terminology of *Kadar* : '*Neelilachevukodi*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : The wood is used in hut making.  
Ethnoecological knowledge : The fruits are the eaten by hornbills. It flowers in summer ('*Vedakaalam*').  
Other information : Nil.

172. Scientific name : ***Actinodaphne tadulingamii* Gamble**  
Terminology of *Kadar* : '*Chovukodi*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : The wood is used in hut making.  
Ethnoecological knowledge : The fruits are the eaten by hornbills. It flowers in summer ('*Vedakaalam*').  
Other information : Nil.

173. Scientific name : ***Actinodaphne wightiana* (Kuntze) Noltie**  
Terminology of *Kadar* : '*Neelilachevukodi*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : The wood is used in hut making.  
Ethnoecological knowledge : The fruits are the eaten by hornbills. It flowers in summer ('*Vedakaalam*').  
Other information : Nil.

174. Scientific name : ***Alseodaphne semecarpifolia angustifolia* Meissner**  
Terminology of *Kadar* : '*Cheenthaali*'

Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : The wood is used in hut making.  
Ethnoecological knowledge : The fruits are the eaten by hornbills.  
Other information : Nil.

175. Scientific name : ***Beilschmiedia gemmiflora* (Blume) Kosterm.**  
Terminology of *Kadar* : 'Chovukodi'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : The wood is used in hut making.  
Ethnoecological knowledge : The fruits are the eaten by hornbills. It flowers in summer ('*Vedakaalam*').  
Other information : Nil.

176. Scientific name : ***Cinnamomum bejolghota* (Buch.-Ham.) Sweet**  
Terminology of *Kadar* : 'Lavangapatta'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Bark used as an MFP.  
Ethniclivelihood knowledge : The wood is used in hut making.  
Ethnoecological knowledge : The fruits are the eaten by hornbills. It flowers in summer ('*Vedakaalam*').  
Other information : Nil.

177. Scientific name : ***Cinnamomum camphora* (L.) J. Presl.**  
Terminology of *Kadar* : 'Pulimbilaavu'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : The wood is used in hut making.  
Ethnoecological knowledge : The fruits are the eaten by hornbills.  
Other information : The *Kadar* know that the camphor is the product of this tree.

178. Scientific name : ***Cinnamomum sulphuratum* Nees**  
Terminology of *Kadar* : '*Pattamaram*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Seed is used as MFP.  
Ethniclivelihood knowledge : The wood is used in hut making.  
Ethnoecological knowledge : The fruits are the eaten by hornbills. It flowers in summer ('*Vedakaalam*').  
Other information : Nil.

179. Scientific name : ***Litsea beddomei* Hook. f.**  
Terminology of *Kadar* : '*Chovukodi*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : The wood is used in hut making.  
Ethnoecological knowledge : The fruits are the eaten by hornbills. It flowers in summer ('*Vedakaalam*'). The habitat of the plant is in high elevation.  
Other information : Nil.

180. Scientific name : ***Litsea coriacea***  
Terminology of *Kadar* : '*Chevukodi*' / '*Vellachevukodi*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : The wood is used in hut making.

Ethnoecological knowledge : The fruits are the eaten by hornbills. It flowers in summer ('*Vedakaalam*').

Other information : Nil.

181. Scientific name : ***Litsea floribunda* (Bl.) Gamble**

Terminology of *Kadar* : '*Chovukodi*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : The wood is used in hut making.

Ethnoecological knowledge : The fruits are the eaten by hornbills. It flowers in summer ('*Vedakaalam*').

Other information : Nil.

182. Scientific name : ***Litsea stocksii* Hook. fil.**

Terminology of *Kadar* : '*Neelilachevukodi*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : The wood is used in hut making.

Ethnoecological knowledge : The fruits are the eaten by hornbills.

Other information : Nil.

183. Scientific name : ***Machilus glaucescens* (Nees) Wight**

Terminology of *Kadar* : '*Kulamavu*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : The wood is used in hut making.

Ethnoecological knowledge : The fruits are the eaten by hornbills. It flowers in summer ('*Vedakaalam*').

- Other information : Nil.
184. Scientific name : ***Neolitsea cassia* (L.) Kosterm.**
- Terminology of *Kadar* : 'Chovukodi'
- Ethnomedicinal knowledge : Nil.
- Ethnoeconomical knowledge : Nil.
- Ethniclivelihood knowledge : The wood is used in hut making.
- Ethnoecological knowledge : The fruits are the eaten by hornbills. It flowers in summer ('*Vedakaalam*').
- Other information : Nil.
185. Scientific name : ***Neolitsea pallens* (D. Don) Momiy. & H. Hara**
- Terminology of *Kadar* : 'Chovukodi'
- Ethnomedicinal knowledge : Nil.
- Ethnoeconomical knowledge : Nil.
- Ethniclivelihood knowledge : The wood is used in hut making.
- Ethnoecological knowledge : The fruits are the eaten by hornbills. It flowers in summer ('*Vedakaalam*').
- Other information : Nil.
186. Scientific name : ***Phoebe lanceolata* (Nees) Nees**
- Terminology of *Kadar* : '*Vinayalichevikodoi*' / '*Chiplampatta*'
- Ethnomedicinal knowledge : Nil.
- Ethnoeconomical knowledge : Nil.
- Ethniclivelihood knowledge : The wood is used in hut making.
- Ethnoecological knowledge : The trunk is very hard.
- Other information : The *Kadar* identified that the wood of the tree is stronger than other members of the family. So they calls

this tree '*Vinayalichevukodi*' which means Strong Actinodaphne / Litsea.

### **Lecythidaceae**

187. Scientific name : ***Careya arborea* Roxb.**
- Terminology of *Kadar* : '*Pekkumaram*'
- Ethnomedicinal knowledge : The steam of boiled water with the bark is inhaled against toothache.
- Ethnoeconomical knowledge : Nil.
- Ethniclivelihood knowledge : Nil.
- Ethnoecological knowledge : It seen in '*Velinkaadu*' (Dry deciduous forest)
- Other information : Nil.

### **Loganiaceae**

188. Scientific name : ***Strychnos nux-vomica* L.**
- Terminology of *Kadar* : '*Kanjiram*'
- Ethnomedicinal knowledge : Nil.
- Ethnoeconomical knowledge : Nil.
- Ethniclivelihood knowledge : The bark used to kill dogs. Fruits and leaves are used as a herbal fish-stupefying agent and it is also an insect repellent.
- Ethnoecological knowledge : This plant is poisonous.
- Other information : Nil.

### **Lythraceae**

189. Scientific name : ***Lagerstroemia lanceolata* Wall.**
- Terminology of *Kadar* : '*Veyaavu*' / '*Vezhaavu*' / '*Beyaavu*'
- Ethnomedicinal knowledge : Bark is used for Bronchitis, indigestion, body pain and stomach ache.

Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : Nil.  
 Ethnoecological knowledge : It flowers in summer ('Vedakaalam'). The wood is dusty.  
 Other information : Nil.

190. Scientific name : ***Lagerstroemia speciosa* (L.) Pers.**  
 Terminology of *Kadar* : '*Manimaruthu*'  
 Ethnomedicinal knowledge : Nil.  
 Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : Nil.  
 Ethnoecological knowledge : It flowers in summer ('Vedakaalam').  
 Other information : Nil.

### **Malvaceae**

191. Scientific name : ***Bombax ceiba* L.**  
 Terminology of *Kadar* : '*Elavan*'  
 Ethnomedicinal knowledge : Nil.  
 Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : Nil.  
 Ethnoecological knowledge : It flowers in summer ('Vedakaalam'). Seed dispersal is through the wind. The Bombax trees are one of the major nesting trees of Giant honey bees.  
 Other information : The flowering of bombax will increase the sugariness and taste of wild honey. '*Elavanpoomari*' is a terminology of *Kadar* for the convectional rainfall. The rainfall is in the time of bombax flowering, and the amount of honey is depending upon the '*Elavanpoomari*'. The lack of summer rainfall will subside the amount of wild honey.



192. Scientific name : ***Bombax insigne* Wall.**  
Terminology of *Kadar* : '*Kallillavu*' / '*Kundilavvu*' / '*Paaraelavu*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : The *Bombax insigne* is seen in open rocky cliffs in the forest. Seed dispersal is through the wind.  
Other information : The terms '*Kallillavu*' / '*Kundilavvu*' / '*Paaraelavu*' are coming from habitat identification.

193. Scientific name : ***Cullenia exarillata* A. Robyns**  
Terminology of *Kadar* : '*Karaani*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnic knowledge : Flowers are edible and cooked or roasted seeds are eaten.  
Ethnoecological knowledge : Seen in '*Adaavi*' (Rain forest) and '*Pachakkaadu*' (evergreen forest). The fruits are the staple for Lion-tailed macaque.  
Other information : The flowers are growing clustered on the old branches of the tree. The similarity in the shape of fruits with the *Artocarpus hirsutus* is the reason for the name '*Kaaraani*' ('*Aani*' or '*Ayanni*' is the term of *Artocarpus hirsutus*).

194. Scientific name : ***Helicteres isora* L.**  
Terminology of *Kadar* : '*Chenari*', '*Kaivan*'  
Ethnomedicinal knowledge : Leaves and fruits are used against insect biting, snakebite, stomach ache, ear ache and used for post-delivery health care.  
Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Bark is used as rope.

Ethnoecological knowledge : Distributed in deciduous forest and semi - evergreen forests. December to January is the flowering and fruiting season.

Other information : Chennari pothimala is a hill, where the abundance of the species gives the name to the hill. It is near to Kallarkudi settlement, Tamil Nadu, India.

195. Scientific name : ***Sida acuta* Burm. f.**

Terminology of *Kadar* : '*Kurunthotti*'

Ethnomedicinal knowledge : Whole plant is a medicine used for body pain and headache.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Nil.

Ethnoecological knowledge : Distributed in dry, moist and deciduous forests.

Other information : Nil.

196. Scientific name : ***Sida alnifolia* L.**

Terminology of *Kadar* : '*Kooraankurunthotti*'

Ethnomedicinal knowledge : Whole plant is a medicine used as anti-dandruff and medicine for hair growth.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Nil.

Ethnoecological knowledge : It is a food plant of '*Kooraanpanti*' (*Moschiola indica*)

Other information : Nil.

197. Scientific name : ***Sida rhombifolia* L.**

Terminology of *Kadar* : '*Perukkacheppu*'

Ethnomedicinal knowledge : Whole plant is a medicine used for body pain and headache.

Ethnoeconomical knowledge :	Nil.
Ethniclivelihood knowledge :	The plant is used as ' <i>perukku</i> ' (broom).
Ethnoecological knowledge :	Distributed in ' <i>Velinkkad</i> ' (Dry deciduous forests), ' <i>Pottelkkad</i> ' (Moist deciduous forests).
Other information :	The meaning of the vernacular name ' <i>Perukkacheppu</i> ' is broom shrub

### **Marantaceae**

198. Scientific name :	<b><i>Indianthus virgatus</i> (Roxb.) Suksathan &amp; Borchs.</b>
Terminology of <i>Kadar</i> :	' <i>Vellakoova</i> '
Ethnomedicinal knowledge :	Rhizome is used to get relief from rheumatism and stomach ache.
Ethnoeconomical knowledge :	Nil.
Ethniclivelihood knowledge :	Nil.
Ethnoecological knowledge :	Seen in ' <i>Pathaal</i> ' (Marshy grass land) and reiver side
Other information :	Nil.

### **Meliaceae**

199. Scientific name :	<b><i>Aglaia edulis</i> (Roxb.) Wall.</b>
Terminology of <i>Kadar</i> :	' <i>Chonakil</i> ' / ' <i>Chembil</i> '
Ethnomedicinal knowledge :	Nil.
Ethnoeconomical knowledge :	Nil.
Ethniclivelihood knowledge :	The wood is used in hut making.
Ethnoecological knowledge :	Monkeys, hornbills, and other birds are the seed dispersal agents.
Other information :	Nil.

200. Scientific name :	<b><i>Aglaia elaeagnoidea</i> (A. Juss.) Benth.</b>
Terminology of <i>Kadar</i> :	' <i>Chembil</i> '

Ethnomedicinal knowledge : Nil.  
 Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : The wood is used in hut making.  
 Ethnoecological knowledge : Monkeys, hornbills, and other birds are the seed dispersal agents.  
 Other information : Nil.

201. Scientific name : ***Aglaia lawii* (Wight)**  
 Terminology of *Kadar* : '*Karagil*' / '*Chembil*'  
 Ethnomedicinal knowledge : Nil.  
 Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : The wood is used in hut making.  
 Ethnoecological knowledge : Monkeys, hornbills, and other birds are the seed dispersal agents.  
 Other information : Nil.

202. Scientific name : ***Azadirachta indica* A. Juss.**  
 Terminology of *Kadar* : '*Veppu*'  
 Ethnomedicinal knowledge : Leaves are used as a medicine for fever and Chickenpox.  
 Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : Leaves and oil extracted from dried fruits are used as leach and insect repellent. The leaves are used to decorate the hamlet and marquee for all ceremony.  
 Ethnoecological knowledge : Seen in '*Velinkkad*' (Dry deciduous forest).  
 Other information : This plant is a domicile of goddesses '*Mariyatha*'.

203. Scientific name : ***Chukrasia tabularis* A. Juss.**  
 Terminology of *Kadar* : '*Vaadayaalichembil*'

Ethnomedicinal knowledge : Nil.  
 Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : The wood is used in hut making.  
 Ethnoecological knowledge : The wood has an aroma.  
 Other information : The terminology '*Vaadayaalichembil*' means aromatic Aglaia

204. Scientific name : ***Dysoxylum malabaricum* Bedd. ex Hiern**  
 Terminology of *Kadar* : '*Vinayali chembil*' / '*Vellakil*'  
 Ethnomedicinal knowledge : Nil.  
 Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : The wood is used in hut making.  
 Ethnoecological knowledge : The *Kadars* know that the wood of the tree is stronger than other members of the family.  
 Other information : The vernacular name '*Vinayali chembil*' means Strong Aglaia.

205. Scientific name : ***Reinwardtiidendron anamalaiense* (Bedd.) D. J. Mabberley**  
 Terminology of *Kadar* : '*Onkalvayichembil*'  
 Ethnomedicinal knowledge : Nil.  
 Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : Nil.  
 Ethnic knowledge : The tree is used for firewood.  
 Ethnoecological knowledge : Monkeys, hornbills, and other birds are the seed dispersal agents.  
 Other information : The wood splits like the mouth of the hornbill when cutting it into pieces for firewood because they call it '*Onkalvayichembil*' (hornbill mouth tree).

206. Scientific name	:	<b><i>Toona ciliata</i> M. Roem.</b>
Terminology of <i>Kadar</i>	:	' <i>Cholavembu</i> '
Ethnomedicinal knowledge	:	Nil.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	The wood is used in hut making.
Ethnoecological knowledge	:	Monkeys, hornbills, and other birds are the seed dispersal agents.
Other information	:	Nil.

### **Menispermaceae**

207. Scientific name	:	<b><i>Anamirta cocculus</i> (L.) Wight &amp; Arn.</b>
Terminology of <i>Kadar</i>	:	' <i>Pollakaya</i> '
Ethnomedicinal knowledge	:	Nil.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Fruits used as a herbal fish-stupefying agent.
Ethnoecological knowledge	:	A climber, seen in ' <i>Pachakkaadu</i> ' (Evergreen Forest) and ' <i>Velinkaadu</i> ' (Dry deciduous forest).
Other information	:	Nil.

208. Scientific name	:	<b><i>Coscinium fenestratum</i> (Gaertn.) Colebr.</b>
Terminology of <i>Kadar</i>	:	' <i>Maramanjalkodi</i> '
Ethnomedicinal knowledge	:	Tuber / mature stem is used to cure stomach pain, back pain, headache and urinary infection.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Nil.
Ethnoecological knowledge	:	The plant seen in ' <i>Pachakkaadu</i> ' (Evergreen forest)
Other information	:	They believe that the plant has the ultimate power to cure all kind of diseases. They believe the plant ward off evil spirit.

209. Scientific name : ***Cyclea peltata* Hook. f. & Thoms.**  
Terminology of *Kadar* : '*Paadaveru*' / '*Padakiyangu*'  
Ethnomedicinal knowledge : Tuber is used for treat stomach pain and diarrhoea.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : It's a leech repellent.  
Ethnoecological knowledge : Distributed in semi - evergreen forests and in the plains.  
Other information : Nil.

210. Scientific name : ***Diploclisia glaucescens* (Bl.) Diels**  
Terminology of *Kadar* : '*Chilanthikizhangu*'  
Ethnomedicinal knowledge : Tuber is a medicine for insect biting or sting.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Seen in '*Pachakkaadu*' (Evergreen Forest) and '*Velinkaadu*' (Dry deciduous forest)  
Other information : Nil.

### **Moraceae**

211. Scientific name : ***Artocarpus gomezianus***  
Terminology of *Kadar* : '*Paak maram*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : The bark is alternative for chewing tobacco.  
Ethnoecological knowledge : Its fruit food for languor and birds.  
Other information : Nil.

212. Scientific name : ***Artocarpus heterophyllus* Lam.**  
Terminology of *Kadar* : '*Chakkamaram*' / '*Plaavu*'

Ethnomedicinal knowledge : Nil.  
 Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : Raw jackfruits and its seeds are used for cooking and ripened fruits are eaten.  
 Ethnoecological knowledge : Seen in '*Pachakkad*' (Evergreen forest) and near to hamlet.  
 Other information : Nil.

213. Scientific name : ***Artocarpus hirsutus* Lam.**  
 Terminology of *Kadar* : '*Ayanni*'  
 Ethnomedicinal knowledge : Nil.  
 Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : Nil.  
 Ethnic knowledge : Ripened fruits are eaten. Cooked or roasted seeds are eaten  
 Ethnoecological knowledge : The plant seen in '*Pachakkad*' (Evergreen Forest). Hornbills and monkeys are the seed dispersal agents.  
 Other information : Nil.

214. Scientific name : ***Artocarpus altilis* (Parkinson) Fosberg**  
 Terminology of *Kadar* : '*Kadachakka*'  
 Ethnomedicinal knowledge : Nil.  
 Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : Fruits are used for cooking  
 Ethnoecological knowledge : Seen in riverbanks.  
 Other information : Nil.

215. Scientific name : ***Ficus amplissima* J. E. Smith in Rees**  
 Terminology of *Kadar* : '*Kuntilamaraavu*'



Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Nil.

Ethnoecological knowledge : The plant normally seen in hills and Rocky areas. Hornbills, doves, myna, barbets, babblers, and other birds and squirrels are the seed dispersal agents. The *Kadars* know that the figs are pollinated by fig wasp. The '*Konayeecha*' is the terminology of fig wasp. They know that the mother wasp will die after laying eggs in the unripened fig. The larvae are in red colour. More larvae are seen in more sweety figs. When babies become mature, they come out from the fig.

Other information : *Kadar* calls '*Kuntilamaraavu*' (The term '*Kuntu*' means hill and '*Maraavu*' means Ficus).

216. Scientific name : ***Ficus anamalayana***

Terminology of *Kadar* : '*Kuntilamaraavu*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Nil.

Ethnoecological knowledge : The plant normally seen in hills and Rocky areas. Hornbills, doves, myna, barbets, babblers, and other birds and squirrels are the seed dispersal agents. The *Kadars* know that the figs are pollinated by fig wasp. The '*Konayeecha*' is the terminology of fig wasp. They know that the mother wasp will die after laying eggs in the unripened fig. The larvae are in red colour. More larvae are seen in more sweety figs. When babies become mature, they come out from the fig.

Other information : *Kadar* calls '*Kuntilamaraavu*' (The term '*Kuntu*' means hill and '*Maraavu*' means Ficus).

217. Scientific name : ***Ficus arnottiana* (Miq.) Miq.**

Terminology of *Kadar* : '*Kuntilamaraavu*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Nil.

Ethnoecological knowledge : The plant normally seen in hills and Rocky areas. Hornbills, doves, myna, barbets, babblers, and other birds and squirrels are the seed dispersal agents. The *Kadars* know that the figs are pollinated by fig wasp. The '*Konayeecha*' is the terminology of fig wasp. They know that the mother wasp will die after laying eggs in the unripened fig. The larvae are in red colour. More larvae are seen in more sweet figs. When babies become mature, they come out from the fig.

Other information : *Kadar* calls '*Kuntilamaraavu*' (The term '*Kuntu*' means hill and '*Maraavu*' means Ficus).

218. Scientific name : ***Ficus beddomei* King**

Terminology of *Kadar* : '*Adaavimaravu*' / '*Cholamaraavu*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Nil.

Ethnoecological knowledge : The rainforest and shola forest are the habitats of the plant. Hornbills, doves, myna, barbets, babblers, and other birds and squirrels are the seed dispersal agents. The *Kadars* know that the figs are pollinated by fig wasp. The '*Konayeecha*' is the terminology of fig wasp. They know that the mother wasp will die after laying eggs in the unripened fig. The larvae are in red colour. More larvae are seen in more sweet figs. When babies become mature, they come out from the fig.

Other information : *Kadar* calls '*Adaavimaraavu*' (The term '*Adaavi*' means Rainforest and '*Maraavu*' means Ficus) or '*Cholamaraavu*' (The term '*Chola*' means Shola forest and '*Maraavu*' means Ficus).

219. Scientific name : ***Ficus benghalensis* L.**

Terminology of *Kadar* : '*Kallichi*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Nil.

Ethnoecological knowledge : Hornbills, doves, myna, barbets, babblers, and other birds and squirrels are the seed dispersal agents. The *Kadars* know that the figs are pollinated by fig wasp. The '*Konayeecha*' is the terminology of fig wasp. They know that the mother wasp will die after laying eggs in the unripened fig. The larvae are in red colour. More larvae are seen in more sweety figs. When babies become mature, they come out from the fig.

Other information : They consider the tree as '*Peyimaram*' (Evil domiciling tree.)

220. Scientific name : ***Ficus callosa Willd.***

Terminology of *Kadar* : '*Velmaraavu*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Nil.

Ethnoecological knowledge : Hornbills, doves, myna, barbets, babblers, and other birds and squirrels are the seed dispersal agents. The *Kadars* know that the figs are pollinated by fig wasp. The '*Konayeecha*' is the terminology of fig wasp. They know that the mother wasp will die after laying eggs in the unripened fig. The larvae are in red colour. More larvae are seen in more sweety figs. When babies become mature, they come out from the fig.

Other information : The colour of the bark is whitish. The terminology '*Velmaraavu*' means white ficus.

221. Scientific name : ***Ficus costata Ait.***

Terminology of *Kadar* : '*Velmaraavu*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethnoecological knowledge : Hornbills, doves, myna, barbets, babblers, and other birds and squirrels are the seed dispersal agents. The *Kadars* know that the figs are pollinated by fig wasp. The '*Konayeecha*' is the terminology of fig wasp. They know that the mother wasp will die after laying eggs in the unripened fig. The larvae are in red colour. More larvae are seen in more sweet figs. When babies become mature, they come out from the fig.

Other information : The colour of the bark is whitish. The terminology '*Velmaraavu*' means white ficus.

222. Scientific name : ***Ficus dalhousiae* (Miq.) Miq.**

Terminology of *Kadar* : '*Kuntilamaraavu*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Nil.

Ethnoecological knowledge : The plant normally seen in hills and Rocky areas. Hornbills, doves, myna, barbets, babblers, and other birds and squirrels are the seed dispersal agents. The *Kadars* know that the figs are pollinated by fig wasp. The '*Konayeecha*' is the terminology of fig wasp. They know that the mother wasp will die after laying eggs in the unripened fig. The larvae are in red colour. More larvae are seen in more sweet figs. When babies become mature, they come out from the fig.

Other information : *Kadar* calls '*Kuntilamaraavu*' (The term '*Kuntu*' means hill and '*Maraavu*' means Ficus).

223. Scientific name : ***Ficus drupacea* Thunb.**

Terminology of *Kadar* : '*Thavittal*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Nil.

Ethnoecological knowledge : Hornbills, doves, myna, barbets, babblers, and other birds and squirrels are the seed dispersal agents. The

*Kadars* know that the figs are pollinated by fig wasp. The '*Konayeecha*' is the terminology of fig wasp. They know that the mother wasp will die after laying eggs in the unripened fig. The larvae are in red colour. More larvae are seen in more sweet figs. When babies become mature, they come out from the fig.

Other information : The powdery characteristics of the bark is the reason for naming. The term '*Thavidu*' means powder.

224. Scientific name : ***Ficus exasperata Vahl***

Terminology of *Kadar* : '*Paaruvaan*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Leave are very rough so they are used for cleaning domestic materials.

Ethnoecological knowledge : Hornbills, doves, myna, barbets, babblers, and other birds and squirrels are the seed dispersal agents. The *Kadars* know that the figs are pollinated by fig wasp. The '*Konayeecha*' is the terminology of fig wasp. They know that the mother wasp will die after laying eggs in the unripened fig. The larvae are in red colour. More larvae are seen in more sweet figs. When babies become mature, they come out from the fig.

Other information : Nil.

225. Scientific name : ***Ficus hispida L. f.***

Terminology of *Kadar* : '*Thondi*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Ripened fruits are eaten.

Ethnoecological knowledge : Hornbills, doves, myna, barbets, babblers, and other birds and squirrels are the seed dispersal agents. The *Kadars* know that the figs are pollinated by fig wasp. The '*Konayeecha*' is the terminology of fig wasp. They know that the mother wasp will die after laying eggs in

the unripened fig. The larvae are in red colour. More larvae are seen in more sweety figs. When babies become mature, they come out from the fig.

Other information : Nil.

226. Scientific name : ***Ficus microcarpa* L.f.**

Terminology of *Kadar* : '*Kannayanimaraavu*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Nil.

Ethnoecological knowledge : Fruits are eaten by many birds. Hornbills, doves, myna, barbets, babblers, and other birds are the seed dispersal agents. The *Kadars* know that the figs are pollinated by fig wasp. The '*Konayeecha*' is the terminology of fig wasp. They know that the mother wasp will die after laying eggs in the unripened fig. The larvae are in red colour. More larvae are seen in more sweety figs. When babies become mature, they come out from the fig.

Other information : Nil.

227. Scientific name : ***Ficus mollis* Vahl**

Terminology of *Kadar* : '*Kuntilamaraavu*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Nil.

Ethnic knowledge : Nil

Ethnoecological knowledge : The plant normally seen in hills and Rocky areas. Hornbills, doves, myna, barbets, babblers, and other birds and squirrels are the seed dispersal agents. The *Kadars* know that the figs are pollinated by fig wasp. The '*Konayeecha*' is the terminology of fig wasp. They know that the mother wasp will die after laying eggs in the unripened fig. The larvae are in red colour. More

larvae are seen in more sweet figs. When babies become mature, they come out from the fig.

Other information : *Kadar* calls '*Kuntilamaraavu*' (The term '*Kuntu*' means hill and '*Maraavu*' means *Ficus*).

228. Scientific name : ***Ficus nervosa***

Terminology of *Kadar* : '*Karimaraavu*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Nil.

Ethnic knowledge : Nil

Ethnoecological knowledge : Hornbills, doves, myna, barbets, babblers, and other birds and squirrels are the seed dispersal agents. The *Kadars* know that the figs are pollinated by fig wasp. The '*Konayeecha*' is the terminology of fig wasp. They know that the mother wasp will die after laying eggs in the unripened fig. The larvae are in red colour. More larvae are seen in more sweet figs. When babies become mature, they come out from the fig.

Other information : The term '*Karimaraavu*' is derived from the blackish colour of the bark. '*Kari*' means black or dark.

229. Scientific name : ***Ficus racemosa* L.**

Terminology of *Kadar* : '*Athi*' / '*Maraavu*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Fruits are edible. Bark used as rope.

Ethnoecological knowledge : Hornbills, doves, myna, barbets, babblers, and other birds and squirrels are the seed dispersal agents. The *Kadars* know that the figs are pollinated by fig wasp. The '*Konayeecha*' is the terminology of fig wasp. They know that the mother wasp will die after laying eggs in the unripened fig. The larvae are in red colour. More

larvae are seen in more sweet figs. When babies become mature, they come out from the fig.

Other information : They consider the tree as '*Peyimaram*' (Evil domiciling tree.)

230. Scientific name : ***Ficus religiosa* L.**

Terminology of *Kadar* : '*Maraavu*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Nil.

Ethnoecological knowledge : Hornbills, doves, myna, barbets, babblers, and other birds and squirrels are the seed dispersal agents. The *Kadars* know that the figs are pollinated by fig wasp. The '*Konayeecha*' is the terminology of fig wasp. They know that the mother wasp will die after laying eggs in the unripened fig. The larvae are in red colour. More larvae are seen in more sweet figs. When babies become mature, they come out from the fig.

Other information : They consider the tree as '*Peyimaram*' (Evil domiciling tree.)

231. Scientific name : ***Ficus travancorica* King**

Terminology of *Kadar* : '*Vilmaraavu*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Bark used as rope for making bow. Bark is used as fishing rope and also used for bracing firewood.

Ethnoecological knowledge : The plant is a '*Kodi*' (climber), but the *Kadar* knows it is a ficus species. The *Kadars* know that the figs are pollinated by fig wasp. The '*Konayeecha*' is the terminology of fig wasp. They know that the mother wasp will die after laying eggs in the unripened fig. The larvae are in red colour. More larvae are seen in more sweet figs. When babies become mature, they come out from the fig.



Other information : The name '*Vilmaravu*' means Bow making ficus.

232. Scientific name : ***Ficus tinctoria parasitica* (Wildenow) Corner**

Terminology of *Kadar* : '*Paraveeti*'

Ethnomedicinal knowledge : Roots are medicine for body pain & stomach ache.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Nil.

Ethnoecological knowledge : *Kadar* knows it is a parasite. Hornbills, doves, myna, barbets, babblers, and other birds and squirrels are the seed dispersal agents. The *Kadars* know that the figs are pollinated by fig wasp. The '*Konayeecha*' is the terminology of fig wasp. They know that the mother wasp will die after laying eggs in the unripened fig. The larvae are in red colour. More larvae are seen in more sweetie figs. When babies become mature, they come out from the fig.

Other information : Nil.

233. Scientific name : ***Ficus tsjahela* Burm. f.**

Terminology of *Kadar* : '*Chelamaraavu*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Nil.

Ethnoecological knowledge : *Kadar* knows it is a parasite. Hornbills, doves, myna, barbets, babblers, and other birds and squirrels are the seed dispersal agents. The *Kadars* know that the figs are pollinated by fig wasp. The '*Konayeecha*' is the terminology of fig wasp. They know that the mother wasp will die after laying eggs in the unripened fig. The larvae are in red colour. More larvae are seen in more sweetie figs. When babies become mature, they come out from the fig.

Other information : Nil.

## **Moringaceae**

234. Scientific name	:	<b><i>Moringa oleifera</i> Lam.</b>
Terminology of <i>Kadar</i>	:	' <i>Muringa</i> '
Ethnomedicinal knowledge	:	Nil.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Leaves, tender fruits, and flowers are used as vegetable.
Ethnoecological knowledge	:	They cultivated near to their huts
Other information	:	Nil.

## **Musaceae**

235. Scientific name	:	<b><i>Ensete superbum</i> (Roxb.) Cheesman</b>
Terminology of <i>Kadar</i>	:	' <i>Kuntavaazha</i> '
Ethnomedicinal knowledge	:	Tender pith is a medicine for head ache. Seed is used for urinary disorders and piles.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Tender pith is used as vegetable. Ripened fruits are eaten.
Ethnoecological knowledge	:	Seen in ' <i>Kunt</i> ' (hill) and side of ' <i>Kuth</i> ' (waterfall).
Other information	:	Nil.

236. Scientific name	:	<b><i>Musa kattuvazhana</i> K. C. Jacob</b>
Terminology of <i>Kadar</i>	:	' <i>Cholavazha</i> '
Ethnomedicinal knowledge	:	Tender pith is a medicine for head ache. Seed is used for urinary disorders and piles.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Tender pith is used as vegetable. Ripened fruits are eaten.
Ethnoecological knowledge	:	It seen in ' <i>Chola</i> ' (Shola forest).
Other information	:	Fruit is full of seeds.

## **Myristicaceae**

237. Scientific name : ***Gymnacranthera canarica* (Bedd. ex King) Warb.**  
Terminology of *Kadar* : '*Pathiri*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Monkeys, hornbills, and other birds are the seed dispersal agents.  
Other information : Nil.

238. Scientific name : ***Knema attenuata* (Hook. fil. & Thoms.) Warb.**  
Terminology of *Kadar* : '*Chorapathiri*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Monkeys, hornbills, and other birds are the seed dispersal agents.  
Other information : The fruit is small. The colour of aril is red.

239. Scientific name : ***Myristica beddomei beddomei***  
Terminology of *Kadar* : '*Undapathiri*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Aril is MFP.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Monkeys, hornbills, and other birds are the seed dispersal agents.  
Other information : The fruit is ovoid. The colour of aril is orange.

240. Scientific name	:	<b><i>Myristica malabarica</i> Lam.</b>
Terminology of <i>Kadar</i>	:	' <i>Pathiripoo</i> '
Ethnomedicinal knowledge	:	Nil.
Ethnoeconomical knowledge	:	Aril is MFP.
Ethniclivelihood knowledge	:	Nil.
Ethnoecological knowledge	:	Monkeys, hornbills, and other birds are the seed dispersal agents.
Other information	:	The fruit is oblong. The colour of aril is Yellow.

### **Myrtaceae**

241. Scientific name	:	<b><i>Psidium guajava</i> L.</b>
Terminology of <i>Kadar</i>	:	' <i>Koyyakaayi</i> ' / ' <i>Pera</i> '
Ethnomedicinal knowledge	:	Bark is used to cure toothache and body pain.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Fruits are edible.
Ethnoecological knowledge	:	Small tree and distributed in semi evergreen and open plains.
Other information	:	Nil.

242. Scientific name	:	<b><i>Syzygium aqueum</i></b>
Terminology of <i>Kadar</i>	:	' <i>Javvakoyya</i> '
Ethnomedicinal knowledge	:	Nil.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Ripened fruits are eaten.
Ethnoecological knowledge	:	Monkeys, squirrels, and birds are the seed dispersal agents.
Other information	:	Nil.

243. Scientific name : ***Syzygium cumini* (L.) Skeels.**  
Terminology of *Kadar* : 'Nara'  
Ethnomedicinal knowledge : The bark is a medicine for tooth ache.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Ripened fruits are eaten. The bark is an ingredient for arrack making.  
Ethnoecological knowledge : Seen in Evergreen forests. Fruits are the food for monkeys, Malabar Spiny Dormouse, Sloth Bear and several birds and also they help in seed dispersal.  
Other information : Nil.

244. Scientific name : ***Syzygium gardneri* Thw.**  
Terminology of *Kadar* : 'Arinara'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Ripened fruits are eaten.  
Ethnoecological knowledge : Monkeys, squirrels, bats, hornbills, and other birds are the seed dispersal agents.  
Other information : Fruits are small size.

245. Scientific name : ***Syzygium mundagam* (Bourd.) Chitra**  
Terminology of *Kadar* : 'Nara'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Ripened fruits are eaten.  
Ethnoecological knowledge : Seen in '*Pachakkad*' (Evergreen forest)  
Other information : Nil.

### **Oleaceae**

246. Scientific name	:	<b><i>Myxopyrum smilacifolium</i> (Wall.) Blume</b>
Terminology of <i>Kadar</i>	:	' <i>Chathuramulla</i> ' / ' <i>Chathurakkodi</i> '
Ethnomedicinal knowledge	:	Tubers are used for blood purification.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Nil.
Ethnoecological knowledge	:	It is a climber, distributed in dry and moist deciduous forests.
Other information	:	Nil.

### **Orchidaceae**

247. Scientific name	:	<b><i>Vanda thwaitesii</i> Hook. f.</b>
Terminology of <i>Kadar</i>	:	' <i>Kallola</i> ', ' <i>Marayola</i> '
Ethnomedicinal knowledge	:	Leaves are used to cure ear ache.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Nil.
Ethnoecological knowledge	:	It seen in trees. The plant flowering during August and september
Other information	:	Nil.

### **Oxalidaceae**

248. Scientific name	:	<b><i>Oxalis corniculata</i> L.</b>
Terminology of <i>Kadar</i>	:	' <i>Puliyadaaku</i> '
Ethnomedicinal knowledge	:	Nil.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Leaves are used as vegetable.
Ethnoecological knowledge	:	Seen in ' <i>Pathaal</i> ' (Marshy grasslands)
Other information	:	Nil.

### **Passifloraceae**

249. Scientific name : ***Adenia hondala* (Gaertn.) de Wilde**  
Terminology of *Kadar* : '*Kannanadaaku*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Tender leaves are used as vegetable.  
Ethnoecological knowledge : Seen in Evergreen forest.  
Other information : Nil.

250. Scientific name : ***Passiflora edulis* Sims**  
Terminology of *Kadar* : '*Mudichipalam*'  
Ethnomedicinal knowledge : Leaves used for diabetic.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : The pulp of the ripened fruits are eaten.  
Ethnoecological knowledge : Cultivating in settlements  
Other information : Nil.

### **Phyllanthaceae**

251. Scientific name : ***Aporosa acuminata* Thwaites**  
Terminology of *Kadar* : '*Kallidala*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : May and June are the fruiting season of the plant.  
Other information : Nil.

252. Scientific name : ***Aporosa cardiosperma* (Gaertn.) Merr.**  
Terminology of *Kadar* : '*Kallidala*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : May and June are the fruiting season of the plant.  
Other information : Nil.

253. Scientific name : ***Baccaurea courtallensis* (Wight) Müll. Arg.**  
Terminology of *Kadar* : '*Oovathan*'  
Ethnomedicinal knowledge : Bark used to cure vomiting. Fruit is a medicine against cold.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Fruits are edible.  
Ethnoecological knowledge : Small tree, evergreen forest, distributed in evergreen and semi - evergreen. Ripened fruits are eaten by Cochin cane turtle, deer, elephant, birds, etc.  
Other information : Nil.

254. Scientific name : ***Bridelia retusa* (L.) A. Juss.**  
Terminology of *Kadar* : '*Mulluvenga*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Ripened fruits are eaten.  
Ethnoecological knowledge : Seen in '*Velinkaad*' (Dry deciduous forest).  
Other information : Nil.

255. Scientific name : ***Phyllanthus amarus* Schum. & Thonn.**



Terminology of *Kadar* : '*Keezharnelli*'  
Ethnomedicinal knowledge : Whole plant is a medicine used for jaundice.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Seen in '*Pathaal*' (Marshy grasslands).  
Other information : Nil.

256. Scientific name : ***Phyllanthus emblica* L.**  
Terminology of *Kadar* : '*Nellika*'  
Ethnomedicinal knowledge : Fruits used against diabetics. Bark is a medicine for toothache.  
Ethnoeconomical knowledge : The fruit is used as an MFP.  
Ethniclivelihood knowledge : Fruits are raw eaten and used to makes pickle.  
Ethnoecological knowledge : Small to medium tree, distributed in '*Velinkaad*' (dry deciduous forest) and '*Pottalkkad*' (Moist deciduous forest)  
Other information : Nil.

257. Scientific name : ***Phyllanthus rheedei* Wight**  
Terminology of *Kadar* : '*Keezharnelli*'  
Ethnomedicinal knowledge : Whole plant is a medicine used for joundice.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Seen in '*Pathaal*' (Marshy grasslands).  
Other information : Nil.

258. Scientific name : ***Phyllanthus reticulatus* Poir.**  
Terminology of *Kadar* : '*Karadikaimadaak*'

Ethnomedicinal knowledge	:	Nil.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Nil.
Ethnoecological knowledge	:	The ripened fruits are food for the parakeets.
Other information	:	Nil.

### **Piperaceae**

259. Scientific name	:	<b><i>Piper umbellatum</i> L.</b>
Terminology of <i>Kadar</i>	:	' <i>Thiriyadaaku</i> '
Ethnomedicinal knowledge	:	Nil.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Nil.
Ethnic knowledge	:	Tender leaves are used as vegetable
Ethnoecological knowledge	:	Seen in road sides of ' <i>Peradaavi</i> ' (Rainforest) and ' <i>Kariadaavi</i> ' (Southern montane wet temperate forest)
Other information	:	Nil.

260. Scientific name	:	<b><i>Piper barberi</i> Gamble.</b>
Terminology of <i>Kadar</i>	:	' <i>Kattukurumulak</i> '
Ethnomedicinal knowledge	:	Nil.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Nil.
Ethnic knowledge	:	Fruit, leaves, shoot and stem are used as medicine for fever, cough, and cold. Dried fruits are MFP and also used as spices.
Ethnoecological knowledge	:	Climbing shrub, distributed in ' <i>Pachakkad</i> ' (Evergreen Forest) and ' <i>Peradaavi</i> ' (Rainforest)
Other information	:	Nil.

261. Scientific name : ***Piper betle* L.**  
Terminology of *Kadar* : '*Vettila*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Leaves are an element of mixture for mastication.  
Ethnoecological knowledge : Cultivated and seen in '*Pachakkad*' ( Evergreen Forest).  
Other information : Nil.

262. Scientific name : ***Piper longum* L.**  
Terminology of *Kadar* : '*Thuppali*' / '*Thuppili*' / '*Thippili*'  
Ethnomedicinal knowledge : Whole plant is used as a medicine against toothache, cough and cold.  
Ethnoeconomical knowledge : *Kadars* collect this plant as MFP.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Distributed in semi - evergreen and evergreen forests.  
Other information : Nil.

263. Scientific name : ***Piper peepuloides* Roxb.**  
Terminology of *Kadar* : '*Kattukurumulak*'  
Ethnomedicinal knowledge : Fruit, leaves, shoot and stem are used as medicine for fever, cough, and cold.  
Ethnoeconomical knowledge : Dried fruits are MFP.  
Ethniclivelihood knowledge : Dried fruits are used as spices.  
Ethnoecological knowledge : Climbing shrub, distributed in evergreen forest  
Other information : Nil.

264. Scientific name : ***Piper nigrum* L.**  
Terminology of *Kadar* : '*Kurumulak*'

Ethnomedicinal knowledge	:	Dried fruits are medicine for cough and cold.
Ethnoeconomical knowledge	:	Dried fruits are MFP.
Ethniclivelihood knowledge	:	Dried fruits are used as spices.
Ethnoecological knowledge	:	Seen in evergreen and semi- evergreen forests, also cultivated.
Other information	:	Nil.

### **Pittosporaceae**

265. Scientific name	:	<b><i>Pittosporum neelgherrense</i> Wight &amp; Arn.</b>
Terminology of <i>Kadar</i>	:	' <i>Analivegam</i> '
Ethnomedicinal knowledge	:	Leaves are used as medicine to treat snake bite.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	The bark of the plant kept around the huts would keep away the snakes and other harmful creatures.
Ethnoecological knowledge	:	Seen in ' <i>Cholakkaadu</i> ' (Shola forest), ' <i>adaavi</i> ' (Rainforest). After fighting with snake, the mongoose eats the plant for protection from the snakebite.
Other information	:	They believes that the plant has the ultimate power to cure all kind of diseases.They believes the plant ward off evil spirit.

### **Poaceae**

266. Scientific name	:	<b><i>Bambusa bambos</i> (L.) Voss</b>
Terminology of <i>Kadar</i>	:	' <i>Mula</i> '
Ethnomedicinal knowledge	:	Tender shoot is a medicine used for abortion and the peelings culm of bamboo used for wound healing.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Boiled bamboo rice and cooked tender shoots are used as food. Culm is used to making traditional bow, bench and hut. The culm is also used for making combs, weapons like ' <i>Chavana</i> ', ' <i>Pichathy</i> ' and digging stick like ' <i>Paorakolu</i> '. The fresh green culm is used to carry

the dead body to the burial place. Tender shoot is used as a herbal fish-stupefying agent.

Ethnoecological knowledge : It seen in '*Velinkaadu*' (Dry deciduous forest).  
Other information : The fresh green culm is considered the symbol of purity.

267. Scientific name : ***Cymbopogon citratus* (DC.) Stapf**

Terminology of *Kadar* : '*Thailappullu*'

Ethnomedicinal knowledge : Whole plant is used as a medicine against body pain, headache and fever.

Ethnoeconomical knowledge : Whole plant is MFP.

Ethniclivelihood knowledge : Nil.

Ethnoecological knowledge : It Seen in '*Medu*' (Grass land).

Other information : Nil.

268. Scientific name : ***Dendrocalamus strictus* (Roxb.)**

Terminology of *Kadar* : '*Mula*'

Ethnomedicinal knowledge : Tender shoot is a medicine used for abortion and the peelings culm of bamboo used for wound healing.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Boiled bamboo rice and cooked tender shoots are used as food. Culm is used to making traditional bow, bench and hut. The culm is also used for making combs, weapons like '*Chavana*', '*Pichathy*' and digging stick like '*Paorakolu*'. The fresh green culm is used to carry the dead body to the burial place. Tender shoot is used as a herbal fish-stupefying agent.

Ethnoecological knowledge : It seen in '*Velinkaadu*' (Dry deciduous forest) and '*pottalkaadu*' (Moist deciduous forest).

Other information : The fresh green culm is considered the symbol of purity.

269. Scientific name : ***Ochlandra scriptoria* (Dennst.) C. E. C. Fisch.**  
Terminology of *Kadar* : 'Veyi'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Culm is used as fishing rod.  
Ethnoecological knowledge : Common in 'Aatirumbu' (River bank).  
Other information : Nil.

270. Scientific name : ***Ochlandra setigiera* Gamble**  
Terminology of *Kadar* : 'Velleetta'  
Ethnomedicinal knowledge : Tender shoots, peeling from the culm are used as medicine for wound healing.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Culm is used for making traditional fish trap, flambeau, basket and hut. The leaves called '*Kandila*' is used to thatch their traditional hut. The culm is used as '*eettakaya*' or '*choondakaya*' (fishing rod).  
Ethnoecological knowledge : Common in 'Aatirumbu' (River bank) and degraded forest.  
Other information : The *Kadar* never harvest the bamboo reeds at the time of full moon to avoid the powderpost beetles attack.

271. Scientific name : ***Ochlandra travancorica* (Bedd.) Benth**  
Terminology of *Kadar* : 'Kaareetta'  
Ethnomedicinal knowledge : Tender shoots, peeling from the culm are used as medicine for wound healing.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Culm is used for making traditional fish trap, flambeau, basket and hut. The leaves called '*Kandila*' is used to thatch their traditional hut. The culm is used as '*eettakaya*' or '*choondakaya*' (fishing rod).

Ethnoecological knowledge : Common in '*Aatirumbu*' (River bank) and degraded forest.

Other information : The *Kadar* never harvest the bamboo reeds at the time of full moon to avoid the powderpost beetles attack.

272. Scientific name : ***Pseudoxytenanthera bourdillonii* (Gamble) H. B. Naithani**

Terminology of *Kadar* : '*Arayambu*'

Ethnomedicinal knowledge : Tender shoot is a medicine used for abortion and the peelings culm of bamboo used for wound healing.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Boiled bamboo rice and cooked tender shoots are used as food. Culm is used to making traditional bow, bench and hut. The culm is also used for making combs, weapons like '*Chavana*', '*Pichathy*' and digging stick like '*Paorakolu*'. The fresh green culm is used to carry the dead body to the burial place. Tender shoot is used as a herbal fish-stupefying agent.

Ethnoecological knowledge : It seen in '*Velinkaadu*' (Dry deciduous forest) and '*Pural*' (Open rocky areas) and plains

Other information : The fresh green culm is considered the symbol of purity.

273. Scientific name : ***Schizostachyum beddomei* (C. E. C. Fisch.) R. B. Majumdar**

Terminology of *Kadar* : '*Noonjooru*'

Ethnomedicinal knowledge : Tender shoots, peeling from the culm are used as medicine for wound healing and body pain.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Culm is used for making traditional fish trap, flambeau, basket, mat and hut. The leaves called '*Kandila*' is used to thatch their traditional hut. The culm is used as '*eettakaya*' or '*choondakaya*' (fishing rod).

Ethnoecological knowledge : Seen in '*Peradaavi*' (Rainforest) and '*Pachakkaadu*' (Evergreen forest).

Other information : The *Kadar* never harvest the bamboo reeds at the time of full moon to avoid the powderpost beetles attack.

274. Scientific name : ***Setaria italica* (L.) P. Beauv.**

Terminology of *Kadar* : '*Thina*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Seeds are used as grain.

Ethnoecological knowledge : Cultivated by other tribal groups like Muthuvan and seen in '*Pathaal*' ( Marshy grass lands) and '*Puraal*' (Open rocky areas).

Other information : Nil.

### **Polygonaceae**

275. Scientific name : ***Persicaria chinensis* (L.)**

Terminology of *Kadar* : '*Odimadavalinayadaaku*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Tender stem and leaves are used as leafy vegetable.

Ethnoecological knowledge : Seen in road sides.

Other information : Nil.

### **Portulacaceae**

276. Scientific name : ***Portulaca oleracea* L.**

Terminology of *Kadar* : '*Pollathandanadaaku*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Tender stem and leaves are used as leafy vegetable.



Ethnoecological knowledge : Seen in '*Pathaal*' (Marshy grasslands) and road side.  
Other information : Nil.

### **Putranjivaceae**

277. Scientific name : ***Drypetes venusta* (Wight) Pax & K. Hoffm**  
Terminology of *Kadar* : '*Palgani*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Used as firewood.  
Ethnoecological knowledge : It flowers in summer ('*Vedakaalam*').  
Other information : Nil.

### **Ranunculaceae**

278. Scientific name : ***Clematis zeylanica* (L.) Poir.**  
Terminology of *Kadar* : '*Eruppakodi*' / '*Vathakodi*' / '*Chalikkodi*'  
Ethnomedicinal knowledge : Leaves used for cure toothache, head ache and Rheumatism. Leaves and stem are inhaled for quick relief from cough and cold.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : The plants seen in moist deciduous forests and also in the plains.  
Other information : Nil.

### **Rhamnaceae**

279. Scientific name : ***Ziziphus oenoplia* (L.) Miller**  
Terminology of *Kadar* : '*Choorimullu*'  
Ethnomedicinal knowledge : Root used as medicine against snake bite.

Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : Nil.  
 Ethnoecological knowledge : Fruits are eaten by birds. Seen in road sides, '*Velinkkad*' (Dry deciduous forest) and boarder areas of '*Pachakkad*' (Evergreen Forest).  
 Other information : Nil.

280. Scientific name : ***Ziziphus rugosa* Lam.**  
 Terminology of *Kadar* : '*Kotta*'  
 Ethnomedicinal knowledge : Root used to cure stomach ache.  
 Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : Nil.  
 Ethnoecological knowledge : Fruits are eaten by birds. Seen in road sides, '*Velinkaad*' (Dry deciduous forest) and boarder areas of '*Pachakkad*' (Evergreen Forest).  
 Other information : Nil.

### **Rubiacea**

281. Scientific name : ***Adina cordifolia* (Roxb.) Brandis**  
 Terminology of *Kadar* : '*Kudala*' / '*Chudala*'  
 Ethnomedicinal knowledge : Bark is used to cure all type of body pain and stomach pain.  
 Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : Nil.  
 Ethnoecological knowledge : Seen in '*Pachakaadu*' (Evergreen Forest)  
 Other information : Nil.

282. Scientific name : ***Canthium rheedei* DC.**  
 Terminology of *Kadar* : '*Karakkay*'

Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Fruits is used as a herbal fish-stupefying agent.  
Ethnoecological knowledge : Seen in '*Pachakaadu*' (Evergreen Forest).  
Other information : Nil.

283. Scientific name : ***Coffea arabica* L.**  
Terminology of *Kadar* : '*Kappi*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Nil.  
Other information : The honey have an aromatic smell of coffee flower when it collecting near from coffee plantation.

284. Scientific name : ***Mitragyna parvifolia* (Roxb.) Korth.**  
Terminology of *Kadar* : '*Chudalamaram*'  
Ethnomedicinal knowledge : Bark is used as a medicine for leg pain.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Seen in '*Velinkaad*' (Dry deciduous forest)  
Other information : Nil.

285. Scientific name : ***Ophiorrhiza mungos* L.**  
Terminology of *Kadar* : '*Keeripacha*'  
Ethnomedicinal knowledge : Leaves are used as anti-venom for snake bite.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.

Ethnoecological knowledge : Nil.  
Other information : After fighting with snake, mongoose eats the plant for protection from the snakebite.

286. Scientific name : ***Rubia cordifolia* L.**  
Terminology of *Kadar* : '*Murikodi*'  
Ethnomedicinal knowledge : Whole plant is used to cure tooth ache.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Climber, Seen in '*Pachakkaadu*' (Evergreen forest) and '*Velinkaadu*' (Open forest).  
Other information : Nil.

### **Rutaceae**

287. Scientific name : ***Glycosmis pentaphylla* (Retz.) DC.**  
Terminology of *Kadar* : '*Panal*' / '*Pana*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Ripened fruit are eaten.  
Ethnoecological knowledge : This plant is the sigh of second stage of succession, this stage is called '*Kale*' Birds and sloth bear are eaten.  
Other information : Nil.

288. Scientific name : ***Zanthoxylum asiaticum* (L.) Appelhans, Groppo & J. Wen**  
Terminology of *Kadar* : '*Puliyorumullu*'  
Ethnomedicinal knowledge : Root is used to cure tooth ache.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.

Ethnoecological knowledge : Seen in 'Adaavi' (Rainforest), 'Pachakkaadu' (Evergreen Forest) and 'Cholakkaadu' (Shola Forest).

Other information : Nil.

### **Salicaceae**

289. Scientific name : ***Flacourtia jangomas* (Lour.) Raeusch**

Terminology of *Kadar* : '*Charalpazham*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Ripened fruits are raw eaten and used to making pickle, wine and arrack.

Ethnoecological knowledge : It's a small tree, seen in evergreen forest.

Other information : Nil.

290. Scientific name : ***Flacourtia montana* J. Graham**

Terminology of *Kadar* : '*Chaliru*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Ripened fruits are raw eaten and used to making pickle, wine and arrack.

Ethnoecological knowledge : Commonly seen in riverside and in the '*Pachakkad*'.  
Fruiting in '*Vedakaalam*' (summer).

Other information : Nil.

### **Sapindacea**

291. Scientific name : ***Cardiospermum halicacabum* L.**

Terminology of *Kadar* : '*Modakkittanaadaak*'

Ethnomedicinal knowledge : Leaves are medicine against kidney stone and Jaundice.

Ethnoeconomical knowledge : Nil.

- Ethniclivelihood knowledge : Nil.
- Ethnoecological knowledge : Seen '*Pathaal*' (Marshy grasslands).
- Other information : Nil.
- 
292. Scientific name : ***Harpullia arborea* (Blanco) Radlk.**
- Terminology of *Kadar* : '*Puzhukkoll*' / '*Chittilamadakku*'
- Ethnomedicinal knowledge : Nil.
- Ethnoeconomical knowledge : Nil.
- Ethniclivelihood knowledge : Whole plant is used as leech repellent.
- Ethnoecological knowledge : It's a small tree, distributed in semi evergreen and evergreen forest.
- Other information : Nil.
- 
293. Scientific name : ***Otonephelium stipulaceum* (Bedd.) Radlk.**
- Terminology of *Kadar* : '*Poovan*'
- Ethnomedicinal knowledge : Nil.
- Ethnoeconomical knowledge : Nil.
- Ethniclivelihood knowledge : The wood is used to make '*Paarakolu*' (digging stick) and '*Kottapidi*' (hammer). The wood is also used in hut making.
- Ethnoecological knowledge : It's a small tree, distributed in semi evergreen and
- Other information : Nil.
- 
294. Scientific name : ***Sapindus trifoliatu*s L.**
- Terminology of *Kadar* : '*Ullurinji*', '*Urunchikaya*', '*Poochakotta*'
- Ethnomedicinal knowledge : Nil.
- Ethnoeconomical knowledge : Nil.
- Ethniclivelihood knowledge : Fruits are used instead of soap. It is used as a herbal fish-stupefying agent.

Ethnoecological knowledge : Seen in '*Pachakkad*' (Evergreen Forest).  
Other information : Nil.

295. Scientific name : ***Schleichera oleosa* (Lour.) Oken**  
Terminology of *Kadar* : '*Kuntilapoovaa*'  
Ethnomedicinal knowledge : Bark is an ingredient in the medicine for restarting fertility.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Fruits are edible. It's fruit or bark used for washing clothes.  
Ethnoecological knowledge : It's a medium tree, seen in semi - evergreen, moist deciduous and in the plains  
Other information : Nil.

### **Sapotaceae**

296. Scientific name : ***Chrysophyllum roxburghii* G. Don**  
Terminology of *Kadar* : '*Noolanga*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Fruits are edible.  
Ethnoecological knowledge : Distributed in '*Peradaavi*' (Moist evergreen Forest) and '*Kariadaavi*' (Rain Forest)  
Other information : Nil.

297. Scientific name : ***Madhuca neriifolia* (Moon) H. J. Lam**  
Terminology of *Kadar* : '*Attillippa*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Fruits are edible and it is used to fishing.

Ethnoecological knowledge : Medium tree. It is seen on banks of rivers in evergreen, semi-evergreen forests and in plains.

Other information : Nil.

298. Scientific name : ***Mimusops elengi* L.**

Terminology of *Kadar* : '*Ilaanchi*', '*Ilanchi*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Fruits are edible.

Ethnoecological knowledge : Seen in '*Pachakkad*' (Evergreen Forest).

Other information : Nil.

299. Scientific name : ***Palaquium ellipticum* (Dalzell) Baill.**

Terminology of *Kadar* : '*Paali*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Fruits are edible.

Ethnoecological knowledge : One of the nesting trees of hornbills. Seen in '*Peradaavi*' (Moist Evergreen Forest).

Other information : Nil.

### **Simaroubaceae**

300. Scientific name : ***Ailanthus triphysa* (Dennst.) Alston**

Terminology of *Kadar* : '*Mattipal*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Latex is used to incense.



Ethnoecological knowledge : It seen in '*Adaavi*' (Rainforest) and '*Pachakkaadu*' (Evergreen forest).

Other information : Nil.

### **Solanacea**

301. Scientific name : ***Nicotiana tabacum L.***

Terminology of *Kadar* : '*Pokala*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Leaves are used for mastication.

Ethnoecological knowledge : Nil

Other information : Nil.

302. Scientific name : ***Physalis angulata L.***

Terminology of *Kadar* : '*Mudichipalam*'

Ethnomedicinal knowledge : Leaves used as a medicine to control diabetics.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Ripened fruits are eaten.

Ethnoecological knowledge : Seen in the open areas, roadside, and wasteland.

Other information : Nil.

303. Scientific name : ***Physalis peruviana L.***

Terminology of *Kadar* : '*Mudichipalam*'

Ethnomedicinal knowledge : Leaves used as a medicine to control diabetics.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Ripened fruits are eaten.

Ethnoecological knowledge : Seen in the open areas, roadside, and wasteland.

Other information : Nil.

304. Scientific name : ***Solanum americanum* Mill.**

Terminology of *Kadar* : '*Chikkuttiadaaku*' / '*Kaataankutiadaaku*' / '*Kakayadaaku*'

Ethnomedicinal knowledge : The whole plant except the root is a medicine for stomach ache and ulcer.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Ripened fruits are eaten. Tender stem and leaves used as leafy vegetable.

Ethnoecological knowledge : Seen in the open areas, roadside, and wasteland.

Other information : Nil.

305. Scientific name : ***Solanum nigrum* L.**

Terminology of *Kadar* : '*Chikkuttiadaaku*' / '*Kaataankutiadaaku*' / '*Kakayadaaku*'

Ethnomedicinal knowledge : The whole plant except the root is a medicine for stomach ache and ulcer.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Ripened fruits are eaten. Tender stem and leaves used as leafy vegetable.

Ethnoecological knowledge : Seen in the open areas, roadside, and wasteland.

Other information : Nil.

306. Scientific name : ***Solanum virginianum* L.**

Terminology of *Kadar* : '*Pechunda*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Fruit used as leech repellent.

Ethnoecological knowledge : Seen in the open areas, roadside, and wasteland.

Other information : Nil.

### **Sterculiaceae**

307. Scientific name : ***Firmiana colorata* (Roxb.) R. Br.**

Terminology of *Kadar* : '*Kadaala*' / '*Malamparathi*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Seeds used for food.

Ethnoecological knowledge : Seen '*Velinkaad*' (Dry deciduous forest)

Other information : Taste of the seed is like Bengal gram.

308. Scientific name : ***Sterculia foetida* L.**

Terminology of *Kadar* : '*Vellathondi*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Fruits are edible.

Ethnoecological knowledge : It flowers in '*Vedakaalam*' (summer).

Other information : Nil.

309. Scientific name : ***Sterculia guttata* Roxb.**

Terminology of *Kadar* : '*Thondi*', '*Peenari*'

Ethnomedicinal knowledge : Bark is used for cold.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Nil.

Ethnoecological knowledge : It flowers in summer ('*Vedakaalam*').

Other information : Nil.

310. Scientific name	:	<b><i>Sterculia villosa</i> Roxb.</b>
Terminology of <i>Kadar</i>	:	'Aananaaru', 'Vakkanaaru'
Ethnomedicinal knowledge	:	Nil.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Bark is used as rope for tying.
Ethnoecological knowledge	:	Seen in ' <i>Velinkaadu</i> ' (Dry deciduous forest). It flowers in summer (' <i>Vedakaalam</i> ').
Other information	:	Nil.

### **Tetramelaceae**

311. Scientific name	:	<b><i>Tetrameles nudiflora</i> R. Br</b>
Terminology of <i>Kadar</i>	:	' <i>Cheeni</i> '
Ethnomedicinal knowledge	:	Nil.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	The bark is used for laundry.
Ethnoecological knowledge	:	Seen in the boarder areas of ' <i>Pachakkad</i> ' (Evergreen forest). Nesting tree of Honey bees and Hornbill. Flowering in ' <i>Vedakkalam</i> ' (Summer season).
Other information	:	Nil.

### **Tiliaceae**

312. Scientific name	:	<b><i>Grewia tiliifolia</i> Vahl</b>
Terminology of <i>Kadar</i>	:	' <i>Chadachi</i> ' / ' <i>Unnam</i> '
Ethnomedicinal knowledge	:	Leaves used as anti-dandruff medicine.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Fruits are eaten. The rope made from the bark is used for tying the firewood.
Ethnoecological knowledge	:	Distributed in moist deciduous forests.
Other information	:	Nil.

## **Urticacea**

313. Scientific name : ***Debregeasia longifolia* (Burm. f.) Wedd.**
- Terminology of *Kadar* : '*Kanavanchi*'
- Ethnomedicinal knowledge : Nil.
- Ethnoeconomical knowledge : Nil.
- Ethniclivelihood knowledge : Bark is used as fishing rope and also used for bracing firewood.
- Ethnoecological knowledge : Distributed in '*Pachakkad*' (Evergreen forest) and '*Peradavi*' (Rainforest).
- Other information : Nil.

314. Scientific name : ***Dendrocnide sinuata* (Bl.) Chew**
- Terminology of *Kadar* : '*Aanathondi*' / '*Piyang*' / '*Chudukolu*'
- Ethnomedicinal knowledge : Bark and decayed leaves are used as a remedy for itching caused by the leaves.
- Ethnoeconomical knowledge : Nil.
- Ethniclivelihood knowledge : Nil.
- Ethnoecological knowledge : It seen in '*Adaavi*' (Rainforest) and '*Pachakkaadu*' (Evergreen forest).
- Other information : Nil.

315. Scientific name : ***Laportea interrupta* (L.) Chew.**
- Terminology of *Kadar* : '*Thuvaadaaku*'
- Ethnomedicinal knowledge : Nil.
- Ethnoeconomical knowledge : Nil.
- Ethniclivelihood knowledge : Leaves are used as vegetable.

Ethnoecological knowledge : Seen in 'Adaavi' (Rainforest), 'Pachakkaadu' (Evergreen forest), 'Velinkaadu' (Dry deciduous forests), 'Pathaal' (Marshy grass land), etc...

Other information : Nil.

316. Scientific name : ***Oreocnide integrifolia* (Gaud.) Miq.**

Terminology of *Kadar* : '*Kanavanchi*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Bark is used as fishing rope and also used for bracing firewood.

Ethnoecological knowledge : Nil.

Other information : Nil.

### **Verbenaceae**

317. Scientific name : ***Clerodendrum infortunatum* L.**

Terminology of *Kadar* : '*Perukinthali*'

Ethnomedicinal knowledge : Leaves used for wound healing.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Nil.

Ethnoecological knowledge : Seen in road sides, river, stream sides and 'Pachakkaadu' (Evergreen Forest), 'Velinkaadu' (Dry deciduous forests), 'Pathaal' (Marshy grass land).

Other information : Nil.

318. Scientific name : ***Lantana camara* L.**

Terminology of *Kadar* : '*Aripoo*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Ripened fruits are eaten.  
Ethnoecological knowledge : Distributes near to hamlets.  
Other information : Nil.

### **Vitaceae**

319. Scientific name : ***Cissus quadrangularis* L.**  
Terminology of *Kadar* : '*Pirasal*'  
Ethnomedicinal knowledge : Whole plant without roots is used as medicine for cure fractures.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Seen '*Velinkaad*' (Dry deciduous Forest).  
Other information : Nil.

320. Scientific name : ***Leea indica* (Burm. f.) Merr.**  
Terminology of *Kadar* : '*Aananjalvu*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Ripened Fruits are eaten by Asian koyel and Food plant of Elephants. Seen in '*Pachakkad*' (Evergreen Forest), and '*Peradaavi*' (Rainforest).  
Other information : Nil.

### **Zingiberaceae**

321. Scientific name : ***Curcuma aromatica* Salisb.**  
Terminology of *Kadar* : '*Manjakoova*'  
Ethnomedicinal knowledge : The grounded rhizome is good medicine for all kinds of skin diseases.

Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : The flour from the rhizome is used as food.  
Ethnoecological knowledge : Seen in '*Pathaal*' (Marshy land).  
Other information : Nil.

322. Scientific name : ***Curcuma caesia* Roxb.**  
Terminology of *Kadar* : '*Karimkoova*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : It collects for medicine makers.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Seen in '*Pathaal*' (Marshy grass land).  
Other information : The colour of the rhizome is black.

323. Scientific name : ***Curcuma longa* L.**  
Terminology of *Kadar* : '*Manjal*'  
Ethnomedicinal knowledge : Rhizome is medicine for skin infection caused by any insects or spider.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Rhizome used in curry.  
Ethnoecological knowledge : Distributed in open areas in evergreen, river banks and wetlands.  
Other information : Nil.

324. Scientific name : ***Curcuma neilgherensis* Wight.**  
Terminology of *Kadar* : '*Vellakoova*'  
Ethnomedicinal knowledge : Rhizome used to cure stomach pain.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.



Ethnoecological knowledge : Seen in '*Pathaal*' (Marshy land).  
Other information : Nil.

325. Scientific name : ***Elettaria cardamomum* (L.) Maton**  
Terminology of *Kadar* : '*Elam*'  
Ethnomedicinal knowledge : Rhizome is a medicine for snake bite.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Dried fruits with seeds are used as spices.  
Ethnoecological knowledge : Seen in '*Pathaal*' (Marshy grass land).  
Other information : Nil.

326. Scientific name : ***Hedygium coronarium* J. Koenig**  
Terminology of *Kadar* : '*Aanachukku*'  
Ethnomedicinal knowledge : Rhizome is medicine used for stomach ache and itching.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Seen in '*Pachakkad*' (Evergreen forest), and '*Peradaavi*' (Rainforest) and '*Pathaal*' ( Marshy grass land)  
Other information : Nil.

327. Scientific name : ***Kaempferia galanga* L.**  
Terminology of *Kadar* : '*Poolaankiyaang*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Rhizome used as a mouth freshener.  
Ethnoecological knowledge : Seen in '*Pathaal*' (Marshy land).  
Other information : Nil.

328. Scientific name : ***Zingiber officinale* Rose.**  
Terminology of *Kadar* : 'Inji'  
Ethnomedicinal knowledge : Dried rhizome is used against cough and cold.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Rhizome used in curry.  
Ethnoecological knowledge : Seen in '*Pathaal*' (Marshy land).  
Other information : Nil.

329. Scientific name : ***Zingiber zerumbet* (L.) J. E Smith**  
Terminology of *Kadar* : 'Kattinji'  
Ethnomedicinal knowledge : Rhizome used for quick relief from throat infection.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Seen in '*Pathaal*' (Marshy grass land).  
Other information : Nil.

## **I.b. Gymnosperms**

### **Cycadaceae**

330. Scientific name : ***Cycas circinalis* L.**  
Terminology of *Kadar* : '*Eenthadaaku*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Tender leaves used as vegetable. Flour from stem and seed is used to make pudding and pancake. Bark is used as a herbal fish-stupefying agent. Leaves are used to decorate their hut and marquee for the ceremony.  
Ethnoecological knowledge : Seen in '*Pachakkad*' (Evergreen Forest).  
Other information : Nil.

## **I.c. Fungi**

### **Auriculariaceae**

331. Scientific name	:	<b><i>Auricularia</i> sp.</b>
Terminology of <i>Kadar</i>	:	' <i>Kathu kumin</i> '
Ethnomedicinal knowledge	:	Nil.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Pileus and stipes used as vegetable.
Ethnoecological knowledge	:	Rarely seen in ' <i>Peradaavi</i> ' (Rainforest) during monsoon season (' <i>Variyakaalam</i> ')
Other information	:	Nil.

### **Boletaceae**

332. Scientific name	:	<b><i>Boletus edulis</i></b>
Terminology of <i>Kadar</i>	:	' <i>Karadiyeeralkumin</i> '
Ethnomedicinal knowledge	:	Nil.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Pileus and stipes used as vegetable.
Ethnoecological knowledge	:	Seen in rainforests during monsoon season (' <i>Variyakaalam</i> ').
Other information	:	The shape of this mushroom is like the liver of a sloth bear.

### **Ganodermataceae**

333. Scientific name	:	<b><i>Ganoderma lucidum</i> (Curtis) P.</b>
Terminology of <i>Kadar</i>	:	' <i>Marakumin</i> '
Ethnomedicinal knowledge	:	Lower surface of the thallus used for head ache.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Nil.
Ethnoecological knowledge	:	Seen in rainforests during monsoon season (' <i>Variyakaalam</i> ')

Other information : Nil.

### **Lentinaceae**

334. Scientific name : ***Plurotus sp.***  
Terminology of *Kadar* : '*Marakumin*'  
Ethnomedicinal knowledge : Pileus and stipes used to cure burns and wounds.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Seen in decaying trees during monsoon season ('*Variyakaalam*')  
Other information : Nil.

### **Lyophyllaceae**

335. Scientific name : ***Termitomyces clypeatus***  
Terminology of *Kadar* : '*Choondukumin*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Pileus and stipes used as vegetable.  
Ethnoecological knowledge : Seen in rainforests during monsoon season ('*Variyakaalam*')  
Other information : Nil.

336. Scientific name : ***Termitomyces fuliginosus***  
Terminology of *Kadar* : '*Vavuladi kumin*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Pileus and stipes used as vegetable.

Ethnoecological knowledge : Seen in rainforests during monsoon season ('Variyakaalam')

Other information : It has the smell of bat.

337. Scientific name : ***Termitomyces heimii***

Terminology of *Kadar* : 'Puttakumin'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Pileus and stipes used as vegetable.

Ethnoecological knowledge : Seen in bamboo forests during monsoon season ('Variyakaalam')

Other information : Nil.

338. Scientific name : ***Termitomyces indicus***

Terminology of *Kadar* : 'Vishakumin'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Nil.

Ethnoecological knowledge : Seen in rainforests during monsoon season ('Variyakaalam').

Other information : Poisonous.

339. Scientific name : ***Termitomyces microcarpus* (Berk and Br.) Helim.**

Terminology of *Kadar* : 'Arikumin'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Pileus and stipes used as vegetable.

Ethnoecological knowledge : Seen in rainforests during monsoon season ('Variyakaalam')

Other information : Nil.

### **Pleurotaceae**

340. Scientific name : ***Pleurotusostreatus* (Jacq.) P. Kumm. 1870**

Terminology of *Kadar* : '*Marakkumin*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Pileus and stipes used as vegetable.

Ethnoecological knowledge : Seen in rainforests during monsoon season ('*Variyakaalam*')

Other information : Nil.

### **Pluteaceae**

341. Scientific name : ***Volvariella bombycina***

Terminology of *Kadar* : '*Narukkanikumin*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Pileus and stipes used as vegetable.

Ethnoecological knowledge : Seen in rainforests during monsoon season ('*Variyakaalam*')

Other information : Nil.

## **I.d. Pteridophytes**

### **Angiopteridaceae**

342. Scientific name : ***Angiopteris* sp.**

Terminology of *Kadar* : '*Kidang adaak*'

Ethnomedicinal knowledge : The grounded rhizome is used to cure swelling.

Ethnoeconomical knowledge : Nil.

Ethnic livelihood knowledge : Tender leaves used for curry.  
Ethnoecological knowledge : Seen in open areas in '*Pachakkad*' (Evergreen Forest), road side and side of streams and river  
Other information : Nil.

### **Aspliniaceae**

343. Scientific name : ***Asplenium phyllitidis* D. Don**  
Terminology of *Kadar* : '*Marappanna*'  
Ethnomedicinal knowledge : Whole plant used for scabies and itches.  
Ethnoeconomical knowledge : Nil.  
Ethnic livelihood knowledge : Nil.  
Ethnoecological knowledge : Seen in '*Peradaavi*' (Rainforest) and '*Kariadaavi*' (Southern montane wet temperate forest)  
Other information : Nil.

### **Athyriaceae**

344. Scientific name : ***Diplazium esculentum* (Retz.) Sw.**  
Terminology of *Kadar* : '*Suruliadaaku*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethnic livelihood knowledge : Nil.  
Ethnic knowledge : Tender leaves used as vegetable  
Ethnoecological knowledge : Seen in the bank of '*Chal*' (Stream) or '*Aattu*' (River).  
Other information : Nil.

### **Polypodiaceae**

345. Scientific name : ***Aglaomorpha quercifolia* (L.) Hovenkamp & S. Linds.**

Terminology of *Kadar* : '*Ulayalavalli*', '*Kellola*'  
 Ethnomedicinal knowledge : Rhizomes and leaves used as medicine for ear ache, stomach ache, diarrhoea in children and fever related to snake bite.  
 Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : Nil.  
 Ethnoecological knowledge : Seen in '*Peradaavi*' (Rainforest) and '*Kariadaavi*' (Southern montane wet temperate forest)  
 Other information : Nil.

346. Scientific name : ***Drynaria quercifolia* (L.) J. Sm.**  
 Terminology of *Kadar* : '*Ulayalavalli*'  
 Ethnomedicinal knowledge : Stem used for snake bite.  
 Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : Nil.  
 Ethnoecological knowledge : Seen in '*Peradaavi*' (Rainforest) and '*Kariadaavi*' (Southern montane wet temperate forest)  
 Other information : Nil.

347. Scientific name : ***Lemmaphyllum microphyllum* C. Presl**  
 Terminology of *Kadar* : '*Kodipanna*'  
 Ethnomedicinal knowledge : Nil.  
 Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : Leaves used in fish curry.  
 Ethnoecological knowledge : It sprout from the leaves.  
 Other information : The taste of the leaves is sour.

348. Scientific name : ***Pyrrosia lanceolata* (L.) Farw.**  
 Terminology of *Kadar* : '*Thiriyan*'



Ethnomedicinal knowledge : Whole plant used for ear ache.  
 Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : Nil.  
 Ethnoecological knowledge : Seen in '*Peradaavi*' (Rainforest) and '*Kariadaavi*' (Southern montane wet temperate forest)  
 Other information : Nil.

### **Pteridaceae**

349. Scientific name : ***Actiniopteris radiata* (Koenig ex Sw.) Link**  
 Terminology of *Kadar* : '*Kallupana*'  
 Ethnomedicinal knowledge : Whole plant with *curcuma longa* used as medicine against wounds.  
 Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : Nil.  
 Ethnoecological knowledge : Rarely found in dry rocks.  
 Other information : Nil.

350. Scientific name : ***Adiantum philippense***  
 Terminology of *Kadar* : '*Kathirpanna*'  
 Ethnomedicinal knowledge : The paste of leaves is good for applying to the wound.  
 Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : Nil.  
 Ethnoecological knowledge : Everywhere in the moisture condition.  
 Other information : Nil.

351. Scientific name : ***Parahemionitis cordata* (Roxb. ex Hook. & Grev.) Fraser-Jenkins**  
 Terminology of *Kadar* : '*Elichevi*'

Ethnomedicinal knowledge : Leaves are used for burns and wound healing.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : It seen in every habitat.  
Other information : Nil.

## II. Ethnic knowledge and Ethnoecological knowledge of faunal diversity by *Kadar* ethnic community

### II.a. Mammals

#### Bovidae

1. Scientific name : *Bos gaurus*
- Terminology of *Kadar* : 'Pothu' / 'Kaati'
- Ethnomedicinal knowledge : Nil.
- Ethniclivelihood knowledge : Nil.
- Ethnoecological knowledge : In summer season, the wild gaur spent more time in 'Pathaal' (Marshy grassland).
- Other information : The *Kadar* community believes that the wild gaur is their ancestor. They will never eat the meat and will never touch the dung because of respect.

#### Cercopithecidae

2. Scientific name : *Macaca silenus*
- Terminology of *Kadar* : 'Chettikkuranku'
- Ethnomedicinal knowledge : Nil.
- Ethniclivelihood knowledge : Nil.
- Ethnoecological knowledge : The Lion-tailed macaque lives in the 'Peradaavi' (Rainforest). They spend most of their lifetime on the canopy of the big trees. The flowers and fruits of *Cullenia exarillata* are their staple food.
- Other information : Nil.

3. Scientific name : *Semnopithecus johnii*
- Terminology of *Kadar* : 'Karinkuranku', 'Karuvakuraanku', 'Karimanthi', 'Manthi'
- Ethnomedicinal knowledge : Nil.

- Ethniclivelihood knowledge : Nil.
- Ethnoecological knowledge : The Nilgiri langur lives in '*Peradaavi*' (Rainforest) and '*Pachakkaad*' (Evergreen forest). Shoots, leaves and fruits are their diets.
- Other information : Nil.

### **Cervidae**

4. Scientific name : *Axis axis*
- Terminology of *Kadar* : '*Pullimaan*'
- Ethnomedicinal knowledge : Nil.
- Ethniclivelihood knowledge : The *Kadar* consume the meat of spotted deer hunted by wild dogs and leopards.
- Ethnoecological knowledge : The spotted deers are seen in '*Pottelkaad*' (Moist deciduous forest) and '*Velinkaad*' (Dry deciduous forest). In summer season, the spotted deer spent more time in '*Pathaal*' (Marshy grassland)
- Other information : The *Kadars* never hunt the deer. But when they see any hunting, they will wait until the end of hunting. They collect the meat by scaring away the predators when the hunting is over. The *Kadars* never take the meat fully. They acquire only a small piece and leave the hunted animal to the real owners that the predators. They say thanks to the predators for getting the food.

5. Scientific name : *Muntiacus muntjak*
- Terminology of *Kadar* : '*Keymaan*'
- Ethnomedicinal knowledge : Nil.
- Ethniclivelihood knowledge : The *Kadar* consume the meat of barking deer hunted by wild dogs and leopards.
- Ethnoecological knowledge : The barking deers are seen in '*Peradaavi*' (Rainforest) and '*Pachakkaadu*' (Evergreen Forest). In summer season, the barking deer spent more time in '*Pathaal*' (Marshy grassland).

Other information : The *Kadars* never hunt the deer. But when they see any hunting, they will wait until the end of hunting. They collect the meat by scaring away the predators when the hunting is over. The *Kadars* never take the meat fully. They acquire only a small piece and leave the hunted animal to the real owners that the predators. They say thanks to the predators for getting the food.

6. Scientific name : ***Rusa unicolor***

Terminology of *Kadar* : '*Kadamaan*' / '*Kalamaan*'

Ethnomedicinal knowledge : Nil.

Ethniclivelihood knowledge : The *Kadar* consume the meat of sambar deer hunted by wild dogs and leopards.

Ethnoecological knowledge : The sambar deers are seen in '*Peradaavi*' (Rainforest) and '*Pachakkaadu*' (Evergreen Forest). In summer season, the sambar deer spent more time in '*Pathaal*' (Marshy grassland)

Other information : The *Kadars* never hunt the deer. But when they see any hunting, they will wait until the end of hunting. They collect the meat by scaring away the predators when the hunting is over. The *Kadars* never take the meat fully. They acquire only a small piece and leave the hunted animal to the real owners that the predators. They say thanks to the predators for getting the food.

## **Elephantidae**

7. Scientific name : ***Elephas maximus***

Terminology of *Kadar* : '*Aana*'

Ethnomedicinal knowledge : Nil.

Ethniclivelihood knowledge : Nil.

Ethnoecological knowledge : In summer season, elephants spent more time in '*Pathaal*' (Marshy grassland)

Other information : The *Kadars* calling elephant as '*Peran*' (Grandpa) to make their children fearless. The *Kadars* consider

elephants are their ancestors. The herd of elephant is called as '*Aanappada*'.

### **Felidae**

8. Scientific name : *Panthera pardus*
- Terminology of *Kadar* : '*Puli*' / '*Nari*'
- Ethnomedicinal knowledge : Nil.
- Ethniclivelihood knowledge : Nil.
- Ethnoecological knowledge : The leopard likes to eat honeycomb.
- Other information : *Kadar* says '*Maattaaan*' when see leopard in the forest. The dying of old age is in the cave.

9. Scientific name : *Panthera tigris*
- Terminology of *Kadar* : '*Variyan*' / '*Variyanpuli*' / '*Nari*'
- Ethnomedicinal knowledge : Nil.
- Ethniclivelihood knowledge : Nil.
- Ethnoecological knowledge : The tiger likes to eat honeycomb. It is seen on the riverbank in the '*Vedakkaalam*' (summer season). There is one tiger inhabit on its territory.
- Other information : *Kadar* says '*Maattaaan*' when see tiger in the forest. The dying of old age is in the cave. The male tiger has a belly rather than the female. The tigers do pee to mark their territory.

### **Herpestidae**

10. Scientific name : *Herpestes fuscus*
- Terminology of *Kadar* : '*Kurunthenunniveruk*'
- Ethnomedicinal knowledge : Nil.
- Ethniclivelihood knowledge : Nil.
- Ethnoecological knowledge : Honeycomb is the staple food for the brown mongoose.
- Other information : Nil.

11. Scientific name	:	<b><i>Herpestes smithii</i></b>
Terminology of <i>Kadar</i>	:	' <i>Poovaaliveruku</i> '
Ethnomedicinal knowledge	:	Hairs from the tail is used to inhale to get relief from diseases.
Ethniclivelihood knowledge	:	Nil.
Ethnoecological knowledge	:	Seen in everywhere in the forest
Other information	:	Nil.

### **Hystricidae**

12. Scientific name	:	<b><i>Hystrix indica</i></b>
Terminology of <i>Kadar</i>	:	' <i>Mullanpanti</i> '
Ethnomedicinal knowledge	:	Nil.
Ethniclivelihood knowledge	:	Nil.
Ethnoecological knowledge	:	The porcupines collect and store bones in their caves and eat them for new thorns.
Other information	:	The <i>Kadar</i> believes that keeping the thorn of porcupine in the hut will be a reason for quarrels in the family.

### **Manidae**

13. Scientific name	:	<b><i>Manis crassicaudata</i></b>
Terminology of <i>Kadar</i>	:	' <i>Chalunku</i> ' / ' <i>Chalunkumullan</i> '
Ethnomedicinal knowledge	:	Nil.
Ethniclivelihood knowledge	:	<i>Kadars</i> eat the meat of pangolin.
Ethnoecological knowledge	:	Seen in everywhere in the forest
Other information	:	The meat of pangolin can stimulate sleep. <i>Kadars</i> hunt them with the help of hounds.

### **Sciuridae**

14. Scientific name	:	<b><i>Ratufa indica</i></b>
Terminology of <i>Kadar</i>	:	' <i>Venka</i> '
Ethnomedicinal knowledge	:	Nil.
Ethniclivelihood knowledge	:	Nil.
Ethnoecological knowledge	:	Nil.
Other information	:	The giant squirrels make nests in the trees. They make seven nests for giving birth to their young. They use these nests randomly to spoof predators.

### **Suidae**

15. Scientific name	:	<b><i>Sus scrofa</i></b>
Terminology of <i>Kadar</i>	:	' <i>Panti</i> '
Ethnomedicinal knowledge	:	Nil.
Ethniclivelihood knowledge	:	Nil.
Ethnoecological knowledge	:	In summer season, the wild boar spent more time in ' <i>Pathaal</i> ' (Marshy grassland).
Other information	:	The wild boar digs atleast seven lairs in soil for safety.

### **Ursidae**

16 .Scientific name	:	<b><i>Melursus ursinus</i></b>
Terminology of <i>Kadar</i>	:	' <i>Karaadi</i> '
Ethnomedicinal knowledge	:	The <i>Kadar</i> community use meat and fat as medicine for asthma and bronchitis.
Ethniclivelihood knowledge	:	Nil.
Ethnoecological knowledge	:	The sloth bear eats the honey hive as a whole.
Other information	:	The dying of old age is in the cave. <i>Kadars</i> store the dried meat as medicine.



## II.b. Birds

### Order : Apodiformes

17. Family name	:	<b>Apodidae</b>
Terminology of <i>Kadar</i>	:	' <i>Alavanaadi</i> '
Ethnomedicinal knowledge	:	Nil.
Ethniclivelihood knowledge	:	Nil.
Ethnoecological knowledge	:	It is seen in the clear sky.
Other information	:	Soil is used to make nests on the rock.

### Bucerotidae

18. Scientific name	:	<b><i>Anthracoceros coronatus</i></b>
Terminology of <i>Kadar</i>	:	' <i>Vattionkal</i> '
Ethnomedicinal knowledge	:	Nil.
Ethniclivelihood knowledge	:	Nil.
Ethnoecological knowledge	:	Seen in ' <i>Attoradaavi</i> ' (Riparian Forest). Figs and other fruits are the staple of Malabar pied hornbill.
Other information	:	Nil.

19. Scientific name	:	<b><i>Buceros bicornis</i></b>
Terminology of <i>Kadar</i>	:	' <i>Onkal</i> '
Ethnomedicinal knowledge	:	Nil.
Ethniclivelihood knowledge	:	Nil.
Ethnoecological knowledge	:	They use the big holes in the tallest trees for nesting. ' <i>Paali</i> ' ( <i>Palaquium ellipticum</i> ), ' <i>Ilavan</i> ' ( <i>Bombax ceiba</i> ), ' <i>Ennapine</i> ' ( <i>Prioria pinnata</i> ), ' <i>Cheeni</i> ' ( <i>Tetrameles nudiflora</i> ), etc. are the preferred trees for nesting.
Other information	:	The adult females molt their long feathers when they incubate their eggs. So they can not fly. In early times

the *Kadars* are poached the female hornbills from the nests. It considers as an easy way to collect meat. A flock of Hornbills is called as '*Onkalpada*'.

20. Scientific name : ***Ocyceros griseus***  
Terminology of *Kadar* : '*Cherattaan*'  
Ethnomedicinal knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : The seen in '*Pachakkad*' (Evergreen Forest), '*Peradaavi*' (Rainforest), '*Kariadaavi*' (Southern montane wet temperate forest). Figs and other fruits are the staple of Malabar grey hornbill.  
Other information : Nil.

#### **Order : Caprimulgiformes**

21. Family name : **Caprimulgidae**  
Terminology of *Kadar* : '*Paalaan*'  
Ethnomedicinal knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Insects are the food of '*Paalaan*'. We cannot identify easily when it sitting between dried leaves. The hunting time of this bird is after the sunset. We cannot hear the sound of its flight.  
Other information : Nil.

#### **Hemiprocnidae**

22. Genus name : ***Hemiprocne***  
Terminology of *Kadar* : '*Alavanaadi*'  
Ethnomedicinal knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : It is seen in the clear sky.  
Other information : Soil is used to make nests on the rock.

### **Hirundinidae**

23. Scientific name	:	<i>Cecropis daurica</i>
Terminology of <i>Kadar</i>	:	'Alavanaadi'
Ethnomedicinal knowledge	:	Nil.
Ethniclivelihood knowledge	:	Nil.
Ethnoecological knowledge	:	It is seen in the clear sky.
Other information	:	Soil is used to make nests on the rock.

### **Leiothrichidae**

24. Scientific name	:	<i>Turdoides affinis</i>
Terminology of <i>Kadar</i>	:	'Peenaal', 'Chilappan'
Ethnomedicinal knowledge	:	Nil.
Ethniclivelihood knowledge	:	Nil.
Other information	:	The bird give a sign to the <i>Kadars</i> when other people enter into their path.

### **Motacillidae**

25. Scientific name	:	<i>Motacilla cinerea</i>
Terminology of <i>Kadar</i>	:	'Kattankadali'
Ethnomedicinal knowledge	:	Nil.
Ethniclivelihood knowledge	:	Nil.
Ethnoecological knowledge	:	It is a migrating bird. The birds are seen after the monsoon season. The presence of these birds indicates the monsoon is over.
Other information	:	The <i>Kadar</i> community have a story and a folk song about this bird.

### **Muscicapidae**

26. Scientific name	:	<i>Myophonus horsfieldii</i>
Terminology of <i>Kadar</i>	:	' <i>Poola</i> ' / ' <i>Muthiyarukili</i> '
Ethnomedicinal knowledge	:	Nil.
Ethniclivelihood knowledge	:	Nil.
Ethnoecological knowledge	:	These birds make sounds like whistling in the evening in the monsoon.
Other information	:	The <i>Kadar</i> community is considering this bird as their ancestor. The whistling of the bird is consider as praying. The bird will prevent them from any dangerous situation in the forest by continuously disturbing.

### **Psittaculidae**

27. Scientific name	:	<i>Loriculus vernalis</i>
Terminology of <i>Kadar</i>	:	' <i>Chooriakili</i> '
Ethnomedicinal knowledge	:	Nil.
Ethniclivelihood knowledge	:	Nil.
Ethnoecological knowledge	:	Seen in the morning with a group of birds
Other information	:	Nil.

28. Scientific name	:	<i>Psittacula columboides</i>
Terminology of <i>Kadar</i>	:	' <i>Panantha</i> ', ' <i>Pananthakkili</i> '
Ethnomedicinal knowledge	:	Nil.
Ethniclivelihood knowledge	:	Nil.
Ethnoecological knowledge	:	' <i>Velinkaadu</i> ' (Dry deciduous forest) and ' <i>Pottalkaadu</i> ' (Moist deciduous forest) are the habitat of the bird.
Other information	:	Nil.

29. Scientific name	:	<i>Psittacula krameri</i>
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Terminology of <i>Kadar</i>	:	' <i>Kili</i> ', ' <i>Pachapanantha</i> '
Ethnomedicinal knowledge	:	Nil.
Ethniclivelihood knowledge	:	Nil.
Ethnoecological knowledge	:	' <i>Velinkaadu</i> ' (Dry deciduous forest) and ' <i>Pottalkaadu</i> ' (Moist deciduous forest) are the habitat of the bird.
Other information	:	Nil.

## II.c. Fish

### Cyprinidae

30. Scientific name	:	<b><i>Barbodes carnaticus</i></b>
Terminology of <i>Kadar</i>	:	' <i>Pachilavetti</i> '
Ethnomedicinal knowledge	:	Nil.
Ethnoeconomical knowledge	:	It is an MFP.
Ethniclivelihood knowledge	:	Used for cooking.
Ethnoecological knowledge	:	It lay eggs in between the grasses in the water.
Other information	:	Nil.
31. Genus name	:	<b><i>Barilius</i></b>
Terminology of <i>Kadar</i>	:	' <i>Paavaayi</i> '
Ethnomedicinal knowledge	:	Nil.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Used for cooking.
Ethnoecological knowledge	:	When the breeding time the fishes migrate to small streams from the rivers. It lay eggs in between the grasses in the water.
Other information	:	Nil.
32. Scientific name	:	<b><i>Catla catla</i></b>

Terminology of *Kadar* : '*Kalivu*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : It is an MFP.  
Ethniclivelihood knowledge : Used for cooking.  
Ethnoecological knowledge : It lay eggs in between the grasses in the water.  
Other information : Nil.

33. Scientific name : ***Cyprinus carpio***  
Terminology of *Kadar* : '*Kalivu*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : It is an MFP.  
Ethniclivelihood knowledge : Used for cooking.  
Ethnoecological knowledge : It lay eggs in between the grasses in the water.  
Other information : Nil.

34. Scientific name : ***Dawkinsia assimilis***  
Terminology of *Kadar* : '*Pandan*' / '*Pakiri*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Used for cooking.  
Ethnoecological knowledge : When the breeding time the fishes migrate to small streams from the rivers.  
Other information : Nil.

35. Scientific name : ***Dawkinsia filamentosa***  
Terminology of *Kadar* : '*Pandan*' / '*Pakiri*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Used for cooking.  
Ethnoecological knowledge : When the breeding time the fishes migrate to small streams from the rivers.  
Other information : Nil.

36. Scientific name : ***Devario malabaricus***  
Terminology of *Kadar* : '*Polaantha*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Used for cooking.  
Ethnoecological knowledge : When the breeding time the fishes migrate to small streams from the rivers. It lay eggs in between the grasses in the water.  
Other information : Nil.

37. Scientific name : ***Garra mullya***  
Terminology of *Kadar* : '*Kallotti*' / '*Moykmeen*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Used for cooking.  
Ethnoecological knowledge : When the breeding time the fishes migrate to small streams from the rivers. If the streams have less water, the tigers, civets, sloth bears will hunt them.  
Other information : Nil.

38. Scientific name : ***Haludaria fasciata***  
Terminology of *Kadar* : '*Kariyaan*' / '*Kariyaathi*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Used for cooking.  
Ethnoecological knowledge : When the breeding time the fishes migrate to small streams from the rivers.  
Other information : Nil.

39. Scientific name : ***Hypselobarbus kolus***  
Terminology of *Kadar* : '*Kuzhikuthikooral*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : It is an MFP.  
Ethniclivelihood knowledge : Used for cooking.  
Ethnoecological knowledge : The fish lay eggs on the grasses in the banks of rivers or streams.  
Other information : Nil.

40. Scientific name : ***Hypselobarbus pulchellus***  
Terminology of *Kadar* : '*Eettavetti*' / '*Eettapachilavetti*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : It is an MFP.  
Ethniclivelihood knowledge : Used for cooking.  
Ethnoecological knowledge : It lay eggs in between the grasses in the water.  
Other information : Nil.

41. Scientific name : ***Labeo rohita***  
Terminology of *Kadar* : '*Rogu*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : It is an MFP.  
Ethniclivelihood knowledge : Used for cooking.  
Ethnoecological knowledge : It lay eggs in between the grasses in the water.



Other information : Nil.

42. Scientific name : ***Rasbora dandia***

Terminology of *Kadar* : '*Kanayaan*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Used for cooking.

Ethnoecological knowledge : When the breeding time the fishes migrate to small streams from the rivers. It lay eggs in between the grasses in the water.

Other information : Nil.

43. Scientific name : ***Tor khudree***

Terminology of *Kadar* : '*Choor*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : It is an MFP.

Ethniclivelihood knowledge : Used for cooking.

Ethnoecological knowledge : The Tor fishes select the roots of trees for laying eggs

Other information : Nil.

## **II.d. Reptails**

### **Colubridae**

44. Scientific name : ***Ahaetulla dispar***

Terminology of *Kadar* : '*Pachilapaambu*'

Ethnomedicinal knowledge : Nil.

Ethniclivelihood knowledge : Nil.

Ethnoecological knowledge : Nil.

Other information : Black spots are shown in the skin when the snake become irritated.

45. Scientific name	:	<i>Ahaetulla nasuta</i>
Terminology of <i>Kadar</i>	:	' <i>Pachilapaambu</i> '
Ethnomedicinal knowledge	:	Nil.
Ethniclivelihood knowledge	:	Nil.
Ethnoecological knowledge	:	Nil.
Other information	:	Black spots are shown in the skin when the snake become irritated.

### **Elapidae**

46. Scientific name	:	<i>Ophiophagus hannah</i>
Terminology of <i>Kadar</i>	:	' <i>Karivayala</i> ' / ' <i>Koottupaambu</i> '
Ethnomedicinal knowledge	:	Nil.
Ethniclivelihood knowledge	:	Nil.
Ethnoecological knowledge	:	Nil.
Other information	:	Nest making is the unique character of this snake. The snake makes its nest with dry leaves with the help of body fluid like gummy discharge. Females are making the nest for brooding. At the nesting time, the male snake will guard his pair at the nearest tree branch. After the birth, there is a chance to eat the baby snakes by the male snake. It is one of the reasons for their threat.

### **Pythonidae**

47. Scientific name	:	<i>Python molurus</i>
Terminology of <i>Kadar</i>	:	' <i>Perumpaambu</i> '
Ethnomedicinal knowledge	:	Fat of python is used as medicine for the wrench and skin diseases.
Ethniclivelihood knowledge	:	<i>Kadar</i> community consume the meat of python.
Ethnoecological knowledge	:	It mostly seen in ' <i>pathaal</i> ' (marshy grassland). The fat is seen in the two sides of the intestine cling to the skin.

Other information : Nil.

## **II.e. Amphibians**

### **Nasikabatrachidae**

48. Scientific name : *Nasikabatrachus sahyadrensis*
- Terminology of *Kadar* : 'Kottaan' / 'Thattukottaan'
- Ethnomedicinal knowledge : The *Kadar* community consider its meat as medicine for bronchitis.
- Ethniclivelihood knowledge : Nil.
- Ethnic knowledge :
- Ethnoecological knowledge : The Kottaan is living under the earth. It comes outside at the starting of the monsoon.
- Other information : *Kadars* store the dried meat as medicine.

## **II.f. Insects and others**

### **Apidae**

49. Scientific name : *Apis cerana indica*
- Terminology of *Kadar* : 'Kurunnan'
- Ethnomedicinal knowledge : Honey is used as medicine for all kinds of diseases.
- Ethnoeconomical knowledge : Wild honey and beeswax are MFP.
- Ethniclivelihood knowledge : The *Kadar* community make candles from the beeswax for their livelihood use.
- Ethnoecological knowledge : The flowering of bombax will increase the sugariness and taste of wild honey. 'Elavanpoomari' is a terminology of *Kadar* for the convectional rainfall. The rainfall is in the time of bombax flowering, and the amount of honey is depending upon the 'Elavanpoomari'. The lack of summer rainfall will subside the amount of wild honey. The taste, colour, fragrance, and thickness of wild honey is depends on the flowering plants around the hive.
- Other information : Most of the bees make buzz near the hive at afternoon two thirty to three o clock. The *Kadar* says it is the sound of bathing bee babies.

50. Scientific name : *Apis dorsata dorsata*

Terminology of *Kadar* : 'Vanthen'

Ethnomedicinal knowledge : Honey is used as medicine for all kinds of diseases.

Ethnoeconomical knowledge : Wild honey and beeswax are MFP.

Ethniclivelihood knowledge : The *Kadar* community make candles from the beeswax for their livelihood use.

Ethnoecological knowledge : The Giant honey bee hives are seen on the cliffs of mountains and branches of big and tall trees like *Bombax ceiba*. The flowering of bombax will increase the sugariness and taste of wild honey. 'Elavanpoomari' is a terminology of *Kadar* for the convectional rainfall. The rainfall is in the time of bombax flowering, and the amount of honey is depending upon the 'Elavanpoomari'. The lack of summer rainfall will subside the amount of wild honey. The taste, colour, fragrance, and thickness of wild honey is depends on the flowering plants around the hive.

Other information : Most of the bees make buzz near the hive at evening five to six o'clock. The *Kadar* says it is the sound of bathing bee babies. The bees will not allow other bees into their colony. If other bees entered their colony will be killed by them.

51. Scientific name : *Apis florea fabricius*

Terminology of *Kadar* : 'Kottan'

Ethnomedicinal knowledge : Honey is used as medicine for all kinds of diseases.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : The honey used as food

Ethnoecological knowledge : Seen on small branches of trees.

Other information : *Kadar* never sell the honey from 'Kottan'.

52. Scientific name : *Tetragonula iridipennis*

Terminology of *Kadar* : 'Karinthan'

Ethnomedicinal knowledge	:	Honey is used as medicine for all kinds of diseases.
Ethnoeconomical knowledge	:	Honey is MFP.
Ethniclivelihood knowledge	:	The honey used as food
Ethnoecological knowledge	:	Nil.
Other information	:	The nesting of ' <i>Karintan</i> ' is seen in between rocks .

### **Agaonidae**

53. Subfamily	:	<b>Agaoninae</b>
Terminology of <i>Kadar</i>	:	' <i>Konayeecha</i> '
Ethnomedicinal knowledge	:	Nil.
Ethniclivelihood knowledge	:	Nil.
Ethnoecological knowledge	:	The <i>Kadar</i> 's knows that the figs are pollinated by fig wasp.
Other information	:	The ' <i>Konayeecha</i> ' is the terminology of fig wasp. They know that the mother wasp will die after laying eggs in the unripened fig. The larvae are in red colour. More larvae are seen in more sweet figs. When babies become mature, they come out from the fig. In the summer season, these flies will irritate humans by flying to the eyes.

### **Infraclass: Pentazonia**

54. Superorder	:	<b>Oniscomorpha</b>
Terminology of <i>Kadar</i>	:	' <i>Kannurutta</i> '
Ethnomedicinal knowledge	:	Nil.
Ethniclivelihood knowledge	:	Nil.
Ethnoecological knowledge	:	Nil.
Other information	:	When babies lose their sleep, the parents will roll the pill millipede on around the eyes of the babies.

### III. Ethnic knowledge and Ethnoecological knowledge of floral diversity by *Malasar* ethnic community

#### III.a. Angiosperms

##### Acanthaceae

1. Scientific name : ***Justicia beddomei* (C. B. Cl.) S. S. R. Bennet**
- Terminology of *Malasar* : '*Adalodakam*'
- Ethnomedicinal knowledge : Paste of the root used for easy muscle contraction in vagina region during the give birth.
- Ethnoeconomical knowledge : Nil.
- Ethniclivelihood knowledge : Nil.
- Ethnoecological knowledge : Planted near to hut and seen in '*Malakkad*' (Evergreen Forest).
- Other information : Nil.
- 
2. Scientific name : ***Ruellia prostrata* Poir.**
- Terminology of *Malasar* : '*Thuppalupadakkam*'
- Ethnomedicinal knowledge : The paste of leaves and black paper is used to cure deep wound.
- Ethnoeconomical knowledge : Nil.
- Ethniclivelihood knowledge : Nil.
- Ethnoecological knowledge : Seen in road sides and '*Malakkad*' (Evergreen Forest).
- Other information : Nil.
- 
3. Scientific name : ***Strobilanthes alternata* (Burm. f.) Moylan ex J. R. I. Wood**
- Terminology of *Malasar* : '*Murikootti*'
- Ethnomedicinal knowledge : Leaves are used as medicine for healing wounds.
- Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Seen near to hut and waste lands.  
Other information : Nil.

#### **Aizoaceae**

4. Scientific name : ***Trianthema portulacastrum L.***  
Terminology of *Malasar* : '*Seramilakri*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Tender stem and leaves used as vegetable.  
Ethnoecological knowledge : It seen in wet areas.  
Other information : Nil.

#### **Amaranthaceae**

5. Genus name : ***Achyranthes***  
Terminology of *Malasar* : '*Oorankaya chedi*'  
Ethnomedicinal knowledge : Mixture of grinded inflorescence, fruits and seeds of *Achyranthes* and row honey used as a medicine for cough.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Seen in '*Veyilkkad*' (Dry deciduous forest).  
Other information : Nil.

6. Scientific name : ***Alternanthera sessilis (L.) r. Br. Ex. DC***  
Terminology of *Malasar* : '*Ponnamkannikkeera*' / '*Meenamkannikkeera*'  
Ethnomedicinal knowledge : It improves eye vision.  
Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : It is used as leafy vegetable.  
Ethnoecological knowledge : It is distributed in the Paddy field.  
Other information : Nil.

7. Scientific name : ***Amaranthus caudatus L.***  
Terminology of *Malasar* : '*Thandanlakri*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Leaves and tender stem used as leafy vegetable.  
Ethnoecological knowledge : Seen in waste lands.  
Other information : Nil.

8. Scientific name : ***Amaranthus hybridus L.***  
Terminology of *Malasar* : '*Thandanlakri*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Leaves and tender stem used as leafy vegetable.  
Ethnoecological knowledge : Seen in waste lands.  
Other information : Nil.

9. Scientific name : ***Amaranthus spinosus L.***  
Terminology of *Malasar* : '*Mullukeerai*' / '*Mullulakri*'  
Ethnomedicinal knowledge : Leaves used as leafy vegetable.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Seen in waste lands.  
Other information : A spiny herb.



10. Scientific name : *Amaranthus viridis* L.  
Terminology of *Malasar* : Kuppakeerai / Kuppalakri  
Ethnomedicinal knowledge : Leaves and tender stem used as leafy vegetable.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Seen in waste lands.  
Other information : Nil.

11. Scientific name : *Celosia argentea* L.  
Terminology of *Malasar* : 'Pannalakri'  
Ethnomedicinal knowledge : Tender leaves used as leafy vegetable.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Seen in wastelands.  
Other information : Nil.

### **Anacardiaceae**

12. Scientific name : *Mangifera indica* L.  
Terminology of *Malasar* : 'Kattumanga'  
Ethnomedicinal knowledge : Leaves are used for body pain.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Fruits are edible. They make curry and pickles with the fruits. *Malasar* decorate their temple with its leaves during the festival.  
Ethnoecological knowledge : The fruits are eaten by elephants and other fauna.  
Other information : Nil.

13. Scientific name : ***Semecarpus anacardium* L. f.**  
Terminology of *Malasar* : 'Cherupalam'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Ripened fruits are eaten.  
Ethnoecological knowledge : Seen in river side  
Other information : Nil.

14. Scientific name : ***Spondias pinnata* (L. f.) Kurz.**  
Terminology of *Malasar* : 'Ambazham'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Fruits used to make pickle.  
Ethnoecological knowledge : The fruits are eaten by birds and monkeys.  
Other information : Nil.

### **Annonaceae**

15. Scientific name : ***Miliusa tomentosa* (Roxb.) Finet & Gagnep.**  
Terminology of *Malasar* : 'Kaanakapazham'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Pulp of the ripened fruits are raw eaten.  
Ethnoecological knowledge : Seen in '*Veyilkkad*' (Dry deciduous Forest). The fruits are eaten by birds.  
Other information : Nil.

16. Scientific name : ***Monoon coffeoides* (Thwaites ex Hook. f. & Thomson) B. Xue & R. M. K. Saunders**

Terminology of *Malasar* : 'Nedunaru'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Pulp of the ripened fruits are raw eaten.

Ethnoecological knowledge : The fruits are eaten by birds and monkeys.

Other information : Nil.

17. Scientific name : ***Monoon fragrans* (Dalzell) B. Xue & R. M. K. Saunders**

Terminology of *Malasar* : 'Nedunaru'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Pulp of the ripened fruits are raw eaten.

Ethnoecological knowledge : The fruits are eaten by birds and monkeys.

Other information : Nil.

### **Apiaceae**

18. Scientific name : ***Centella asiatica* (L.) Urb.**

Terminology of *Malasar* : 'Masthishkalakri'

Ethnomedicinal knowledge : External use of grinded leaves can cure skin diseases & Botch.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Used as leafy vegetable.

Ethnoecological knowledge : Seen in wet areas.

Other information : It's a prostrate herb.

## **Apocynaceae**

19. Scientific name : ***Alstonia scholaris* (L.) R. Br.**
- Terminology of *Malasar* : '*Ezhilumpalam*' / '*Paala*'
- Ethnomedicinal knowledge : Latex is medicine against migraine.
- Ethnoeconomical knowledge : Nil.
- Ethniclivelihood knowledge : Nil.
- Ethnoecological knowledge : Seen '*Veyilkkad*' (Dry deciduous Forest).
- Other information : Nil.
- 
20. Scientific name : ***Calotropis gigantea* (L.) W. T. Aiton.**
- Terminology of *Malasar* : '*Erukku*'
- Ethnomedicinal knowledge : Lactex of *Calotropis gigantea* used for ringworm.
- Ethnoeconomical knowledge : Nil.
- Ethniclivelihood knowledge : Nil.
- Ethnoecological knowledge : Seen in '*Veyilkkad*' (Dry deciduous Forest).
- Other information : Nil.
- 
21. Scientific name : ***Cynanchum annularium* (Roxb.) Liede & Khanum**
- Terminology of *Malasar* : '*Anjampaalalakri*'
- Ethnomedicinal knowledge : Nil.
- Ethnoeconomical knowledge : Nil.
- Ethniclivelihood knowledge : Tender leaves and flowers used as vegetable.
- Ethnoecological knowledge : Seen in waste lands.
- Other information : Nil.
- 
22. Scientific name : ***Decalepis hamiltonii* Wight & Arn.**

Terminology of *Malasar* : '*Magaalikizhangu*' / '*Magaalikilangu*'  
 Ethnomedicinal knowledge : Nil.  
 Ethnoeconomical knowledge : Tuber is an MFP.  
 Ethnolivelihood knowledge : Tuber used to make pickle.  
 Ethnoecological knowledge : It grows in rocky areas.  
 Other information : Nil.

23. Scientific name : ***Decalepis salicifolia* (Bedd. ex Hook. f.) Bruyns**  
 Terminology of *Malasar* : '*Magaalikizhangu*' / '*Magaalikilangu*'  
 Ethnomedicinal knowledge : Nil.  
 Ethnoeconomical knowledge : Tuber is an MFP.  
 Ethnolivelihood knowledge : Tuber used to make pickle.  
 Ethnoecological knowledge : It grows in rocky areas.  
 Other information : Nil.

24. Scientific name : ***Hemidesmus indicus* (L.) R. Br.**  
 Terminology of *Malasar* : '*Nannari*'  
 Ethnomedicinal knowledge : Medicine to cure urinary disorders.  
 Ethnoeconomical knowledge : Tuber is an MFP.  
 Ethnolivelihood knowledge : Tuber is used for drinking purpose.  
 Ethnic knowledge : and MFP  
 Ethnoecological knowledge : Seen in everywhere.  
 Other information : Nil.

25. Scientific name : ***Wrightia tinctoria* (Roxb.) R. Br.**  
 Terminology of *Malasar* : '*Dhandhapaala*'  
 Ethnomedicinal knowledge : Tender leaves used as medicine against toothache.

Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : Nil.  
 Ethnoecological knowledge : Seen '*Veyilkkad*' (Dry deciduous Forest)  
 Other information : Nil.

### **Araceae**

26. Scientific name : ***Amorphophallus paeoniifolius* (Dennst.) Nicolson**  
 Terminology of *Malasar* : '*Kattuchena*'  
 Ethnomedicinal knowledge : Nil.  
 Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : Rhizome and tender leaves used for curry.  
 Ethnoecological knowledge : Seen in '*Nallakad*' (Rainforest)  
 Other information : Nil.

27. Scientific name : ***Colocasia esculenta* (L.) Schott.**  
 Terminology of *Malasar* : '*Chembukilangu*' / '*Chembu*' / '*Sembulakri*'  
 Ethnomedicinal knowledge : Nil.  
 Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : Rhizomes, tender leaves, and fruits used for food purpose.  
 Ethnoecological knowledge : Planted near to hut and seen in waste lands.  
 Other information : Nil.

### **Areaceae**

28. Scientific name : ***Areca catechu* L.**  
 Terminology of *Malasar* : '*Paakkmaram*'  
 Ethnomedicinal knowledge : Nil.  
 Ethnoeconomical knowledge : Nil.

Ethnic livelihood knowledge : Seeds are an element of mixture for mastication.  
Ethnoecological knowledge : Planted near to hut.  
Other information : Nil.

29. Scientific name : ***Arenga wightii* Griff.**  
Terminology of *Malasar* : '*Malanthengu*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethnic livelihood knowledge : The tender shoot is raw eaten.  
Ethnic knowledge :  
Ethnoecological knowledge : Seen in stream side and '*Nallakad*' (Rainforest).  
Other information : Nil.

30. Scientific name : ***Borassus flabellifer* L.**  
Terminology of *Malasar* : '*Karimbana*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethnic livelihood knowledge : Tender fruits are raw eaten.  
Ethnoecological knowledge : Seen in roadside and Paddy field. The fruiting time is August and September.  
Other information : Nil.

31. Scientific name : ***Calamus hookerianus* Becc.**  
Terminology of *Malasar* : '*Vallichoorapalam*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethnic livelihood knowledge : Ripened fruits are eaten.  
Ethnoecological knowledge : Seen in '*Malakkad*' (Evergreen forest).

Other information : Nil.

32. Scientific name : ***Calamus thwaitesii* Becc.**

Terminology of *Malasar* : '*Ponthichoorapalam*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Ripened fruits are eaten. Stem used for making digging stick like '*Korakolu*'.

Ethnoecological knowledge : Seen in '*Malakkad*' (Evergreen Forest).

Other information : Nil.

33. Scientific name : ***Caryota urens* L.**

Terminology of *Malasar* : '*Panai*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Flour from stem pith is used to make pudding and appam.

Ethnoecological knowledge : Seen in boarder of '*Malakkad*' (Evergreen forest)

Other information : Nil.

34. Scientific name : ***Cocos nucifera* L.**

Terminology of *Malasar* : '*Thengu*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Nil.

Ethnic knowledge : Fruit used for cooking

Ethnoecological knowledge : Cultivating in settlement

Other information : Nil.



35. Scientific name : ***Phoenix loureiroi* Kunth**  
Terminology of *Malasar* : 'Cheevan'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Ripened fruits are eaten.  
Ethnoecological knowledge : Seen in '*Malakkad*' (Evergreen forest).  
Other information : Nil.

36. Scientific name : ***Pinanga dicksonii* (Roxb.) Blume**  
Terminology of *Malasar* : '*Kaattupaakkumaram*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Tender shoot are raw eaten.  
Ethnoecological knowledge : Seen in '*Malakkad*' (Evergreen forest).  
Other information : Nil.

### **Asparagaceae**

37. Scientific name : ***Asparagus racemosus* Willd.**  
Terminology of *Malasar* : '*Shathavalli*' / '*Chathavalli*'  
Ethnomedicinal knowledge : Tuber used as a medicine for white vaginal discharge and over bleeding during menstruation period in woman.  
Ethnoeconomical knowledge : Tuber is an MFP.  
Ethniclivelihood knowledge : Tuber used for pickle, Roasted or cooked tubers are eaten.  
Ethnoecological knowledge : It is seen in shady areas.  
Other information : Nil.

### **Asphodelaceae**

38. Scientific name : ***Aloe vera* (L.) Burm. f.**
- Terminology of *Malasar* : '*Kattarvazha*'
- Ethnomedicinal knowledge : Gel from leaves is used for stomach pain during menstruation.
- Ethnoeconomical knowledge : Nil.
- Ethniclivelihood knowledge : Nil.
- Ethnoecological knowledge : Seen in rocky areas.
- Other information : Nil.

### **Asteraceae**

39. Scientific name : ***Chromolaena odorata* (L.) R. M. King & H. Rob.**
- Terminology of *Malasar* : '*Communist-pacha*'
- Ethnomedicinal knowledge : The paste of grinded leaves with calcium hydrate is used for treat wound.
- Ethnoeconomical knowledge : Nil.
- Ethniclivelihood knowledge : Nil.
- Ethnoecological knowledge : Seen in everywhere.
- Other information : Nil.

40. Scientific name : ***Cyanthillium cinereum***
- Terminology of *Malasar* : '*Poovamkurunal*'
- Ethnomedicinal knowledge : Whole plant used for urinary obstruction.
- Ethnoeconomical knowledge : Nil.
- Ethniclivelihood knowledge : Nil.
- Ethnoecological knowledge : It is a herb, distributed on the plains.
- Other information : Nil.

41. Scientific name : ***Eclipta prostrata* L.**  
Terminology of *Malasar* : '*Kanjunni*'  
Ethnomedicinal knowledge : Whole plant used for Hair Growth and a remedy for hair fall.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Seen '*Vayal*' or '*Paadam*' (Wetland and Paddy field)  
Other information : Nil.

42. Scientific name : ***Sphaeranthus indicus* L.**  
Terminology of *Malasar* : '*Kottakaranda*'  
Ethnomedicinal knowledge : Roots and flowers are used for septicaemia.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Seen in '*Malakkad*' (Evergreen forest).  
Other information : Nil.

43. Scientific name : ***Vernonia cinerea* (L.) Less var. *cinerea***  
Terminology of *Malasar* : '*Poovamkurunal*'  
Ethnomedicinal knowledge : Whole plant used for urinary obstruction.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : It is a herb, distributed on the plains.  
Other information : Nil.

### **Basellaceae**

44. Scientific name : ***Basella alba* L.**  
Terminology of *Malasar* : '*Vasalalakri*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Tender stem and leaves used as vegetable.  
Ethnoecological knowledge : Seen in '*Veyilkkad*' (Dry deciduous forest).  
Other information : Nil.

### **Boraginaceae**

45. Scientific name : ***Cordia obliqua* Willd.**  
Terminology of *Malasar* : '*Thumbapalam*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Ripened fruits are eaten.  
Ethnoecological knowledge : Seen in '*Veyilkkad*' (Dry deciduous forest).  
Other information : Nil.

46. Scientific name : ***Cordia dichotoma* G. Forst.**  
Terminology of *Malasar* : '*Viri*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Ripened fruits are eaten.  
Ethnoecological knowledge : Seen in '*Veyilkkad*' (Dry deciduous forest).  
Other information : Nil.

47. Scientific name : ***Ehretia aquatica* (Lour.) Gottschling & Hilger**

Terminology of *Malasar* : '*Kallurvachi*'  
 Ethnomedicinal knowledge : Medicine for kidney stone.  
 Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : Whole plant used for drinking purpose.  
 Ethnoecological knowledge : See in rocky areas near to the river.  
 Other information : Nil.

### **Cactaceae**

48. Scientific name : ***Opuntia dillenii* (Ker Gawl.) Haw.**  
 Terminology of *Malasar* : '*Mullukallipalam*'  
 Ethnomedicinal knowledge : Nil.  
 Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : Ripened fruits are eaten.  
 Ethnoecological knowledge : Seen in '*Veyilkkad*' (Dry deciduous forest) and rocky areas  
 Other information : Nil.

49. Scientific name : ***Cereus pterogonus***  
 Terminology of *Malasar* : '*Kathalakilangu*'  
 Ethnomedicinal knowledge : Nil.  
 Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : Fruits are edible.  
 Ethnoecological knowledge : Seen in '*Veyilkkad*' (Dry deciduous forest) and rocky areas  
 Other information : Nil.

### **Calophyllaceae**

50. Scientific name : ***Mesua ferrea* L.**

Terminology of <i>Malasar</i>	:	' <i>Naangu</i> '
Ethnomedicinal knowledge	:	Nil.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	The deadwood is used as firewood. Ripened fruits are eaten.
Ethnoecological knowledge	:	Seen in ' <i>Malakkad</i> ' (Evergreen forest).
Other information	:	Nil.

### **Campanulaceae**

51. Scientific name	:	<b><i>Lobelia heyneana</i> Schult.</b>
Terminology of <i>Malasar</i>	:	' <i>Maankeera</i> ' / ' <i>Maanlakri</i> '
Ethnomedicinal knowledge	:	Nil.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Leaves used as vegetable.
Ethnoecological knowledge	:	Seen in ' <i>Malakkad</i> ' (Evergreen forest) and open areas in forest.
Other information	:	Nil.

### **Cannabaceae**

52. Scientific name	:	<b><i>Trema orientale</i> (L.) Blume</b>
Terminology of <i>Malasar</i>	:	' <i>Amai thali</i> '
Ethnomedicinal knowledge	:	Nil.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Tender shoots and leaves are given to livestock.
Ethnoecological knowledge	:	Seen in ' <i>Veyilkkad</i> ' (Dry deciduous forest)
Other information	:	Nil.

### **Caricaceae**

53. Scientific name	:	<b><i>Carica papaya</i> L</b>
Terminology of <i>Malasar</i>	:	' <i>Pappali</i> '
Ethnomedicinal knowledge	:	Tender fruits and juice from the leaves are raw eat or drink for abortion.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Ripened fruits are eaten. Raw fruits are used as vegetables.
Ethnoecological knowledge	:	Cultivated in settlement areas, Fruits are eaten by birds, Squirrel, Monkey
Other information	:	Nil.

### **Celastraceae**

54. Scientific name	:	<b><i>Salacia reticulata</i> Wight</b>
Terminology of <i>Malasar</i>	:	' <i>Ekanayakam</i> '
Ethnomedicinal knowledge	:	Stem used for the prevention and treatment of diabetes and skin diseases.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Nil.
Ethnoecological knowledge	:	Seen in ' <i>Malakkad</i> ' (Evergreen forest).
Other information	:	Nil.

### **Clusiaceae**

55. Scientific name	:	<b><i>Garcinia gummi-gutta</i> (L.) Roxb.</b>
Terminology of <i>Malasar</i>	:	' <i>Kodampuli</i> '
Ethnomedicinal knowledge	:	Nil.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Ripened fruits are eaten.
Ethnoecological knowledge	:	Seen in ' <i>Nallakaad</i> ' (Rainforest).
Other information	:	Nil.

## **Combretaceae**

56. Scientific name : ***Getonia floribunda* Roxb.**  
Terminology of *Malasar* : 'Pullaani'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : *Malasar* use this plant to lull the thirst in the forest in summer.  
Ethnoecological knowledge : Distributed in '*Veyilkaad*' (Dry deciduous forest).  
Other information : The mature stem contains a lot of water. When cutting the part of the stem the two opposite sides cut off simultaneous. Because, when we cut only one side, the water flow may upward.

57. Scientific name : ***Terminalia arjuna* (Roxb. ex DC.) Wight & Arn.**  
Terminology of *Malasar* : '*Neermaruth*'  
Ethnomedicinal knowledge : Bark of the tree used to heart disease.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Seen in '*Veyilkaad*' (Dry deciduous forest).  
Other information : Nil.

58. Scientific name : ***Terminalia bellirica* (Gaertn.) Roxb.**  
Terminology of *Malasar* : '*Thannimaram*'  
Ethnomedicinal knowledge : The epicarp of fruit is used for cough.  
Ethnoeconomical knowledge : Fruit is used as MFP.  
Ethniclivelihood knowledge : Seeds are raw eaten.  
Ethnoecological knowledge : Seen in '*Veyilkaad*' (Dry deciduous forest).  
Other information : Nil.



59. Scientific name	:	<b><i>Terminalia chebula</i> Retz.</b>
Terminology of <i>Malasar</i>	:	Kadukka
Ethnomedicinal knowledge	:	The epicarp of fruit is used for cough and cold.
Ethnoeconomical knowledge	:	Fruit is used as MFP.
Ethniclivelihood knowledge	:	Nil.
Ethnoecological knowledge	:	Seen in ' <i>Veyilkaad</i> ' (Dry deciduous forest).
Other information	:	Nil.

### **Convolvulaceae**

60. Scientific name	:	<b><i>Argyria hirsuta</i> Wight &amp; Arn.</b>
Terminology of <i>Malasar</i>	:	' <i>Onkattapazham</i> '
Ethnomedicinal knowledge	:	Nil.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Ripened fruits are eaten.
Ethnoecological knowledge	:	Seen in everywhere.
Other information	:	Nil.

61. Scientific name	:	<b><i>Argyria nervosa</i> (Burm. f.) Bojer</b>
Terminology of <i>Malasar</i>	:	' <i>Onkattapazham</i> '
Ethnomedicinal knowledge	:	Nil.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Ripened fruits are eaten.
Ethnoecological knowledge	:	Distributed near to hamlet.
Other information	:	Nil.

62. Scientific name : ***Camonea umbellata* (L.) A. R. Simões & Staples**  
Terminology of *Malasar* : '*Vakaravalli*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Tender shoot and leaves given to livestock.  
Ethnoecological knowledge : Seen in everywhere.  
Other information : Nil.

63. Scientific name : ***Ipomoea aquatica* Forssk.**  
Terminology of *Malasar* : '*Vellalakri*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Tender leaves used as leafy vegetable.  
Ethnoecological knowledge : Seen in road sides and wet areas.  
Other information : Nil.

64. Scientific name : ***Ipomoea batatas* (L.) Lam.**  
Terminology of *Malasar* : '*Chakkaravallikizhangu*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Tubers are raw eaten or cooked and eaten.  
Ethnoecological knowledge : Seen in wet areas.  
Other information : Nil.

### **Cucurbitaceae**

65. Scientific name : ***Coccinia grandis* (L.) Voigt**  
Terminology of *Malasar* : '*Kovalakri*'

Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Tender leaves and tender fruits are used as vegetable.  
Ethnoecological knowledge : Cultivated.  
Other information : Nil.

66. Scientific name : ***Cucumis melo L.***  
Terminology of *Malasar* : Peekinkayi  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Dried fruit is used as body scrubber. Tender leaves are used as a leafy vegetables.  
Ethnoecological knowledge : Seen in waste lands.  
Other information : Nil.

67. Scientific name : ***Cucumis prophetarum L.***  
Terminology of *Malasar* : '*Chithrankai*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Tender leaves are used as a leafy vegetables.  
Ethnoecological knowledge : Seen in wastelands.  
Other information : Nil.

68. Scientific name : ***Cucumis sativus L.***  
Terminology of *Malasar* : '*Vellari*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Tender leaves and Fruits are used as Vegetable.

Ethnoecological knowledge : Cultivated neat to hut.  
Other information : Nil.

69. Scientific name : ***Cucurbita maxima* Duchesne**  
Terminology of *Malasar* : '*Arasankani*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Tender leaves and Fruits are used as Vegetable.  
Ethnoecological knowledge : Cultivated neat to hut.  
Other information : Nil.

70. Scientific name : ***Diplocyclos palmatus* (L.) C. Jeffrey**  
Terminology of *Malasar* : '*Ivirallakri*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Tender leaves are used as a leafy vegetables.  
Ethnoecological knowledge : Seen in waste lands.  
Other information : Nil.

71. Scientific name : ***Momordica dioica* Roxb. ex Willd.**  
Terminology of *Malasar* : '*Paavalai lakri*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Tender leaves and Fruits are used as Vegetable.  
Ethnoecological knowledge : Cultivated neat to hut.  
Other information : Nil.

### **Dilleniaceae**

72. Scientific name : ***Dillenia pentagyna Roxb.***  
Terminology of *Malasar* : '*Pattipunna*' / '*Naithekkku*'  
Ethnomedicinal knowledge : Bark is used as a medicine for dogs to cure the wound.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Ripened fruits are eaten by turtle.  
Other information : Nil.

### **Dioscoreaceae**

73. Scientific name : ***Dioscorea alata L.***  
Terminology of *Malasar* : '*Kaavuthkilangu*', '*Kaavuthshangu*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Tubers are used as a staple food. Roasted or cooked tubers are eaten.  
Ethnoecological knowledge : Seen in waste lands.  
Other information : Nil.

74. Scientific name : ***Dioscorea bulbifera L.***  
Terminology of *Malasar* : '*Noopakilangu*', '*Noopashangu*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Tubers are used as a staple food. Roasted or cooked tubers are eaten.  
Ethnoecological knowledge : It is seen everywhere.  
Other information : Tubers are slightly poisonous. Before cooking, the tuber is kept in running water for one night to remove the poisonous effect.

75. Scientific name : ***Dioscorea hispida* Dennst.**  
Terminology of *Malasar* : '*Thalilikilangu*', '*Thalishangu*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Tubers are used as a staple food. Roasted or cooked tubers are eaten.  
Ethnoecological knowledge : It is seen in the wasteland.  
Other information : Nil.

76. Scientific name : ***Dioscorea intermedia* Thwaites**  
Terminology of *Malasar* : '*Pillamkodi*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Tubers are used as a staple food. Roasted or cooked tubers are eaten.  
Ethnoecological knowledge : It is seen in the wasteland.  
Other information : Nil.

77. Scientific name : ***Dioscorea oppositifolia* L.**  
Terminology of *Malasar* : '*Kaanakizhangu*', '*Kaanashangu*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Tubers are used as a staple food. Roasted or cooked tubers are eaten.  
Ethnoecological knowledge : It is seen in the wasteland.  
Other information : Nil.

78. Scientific name : ***Dioscorea pentaphylla* L**  
Terminology of *Malasar* : '*Naattukilangu*', '*Naattushangu*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Tubers are used as a staple food. Roasted or cooked tubers are eaten.  
Ethnoecological knowledge : It is seen in the wasteland.  
Other information : Nil.

79. Scientific name : ***Dioscorea spicata* B. Heyne ex Roth**  
Terminology of *Malasar* : '*Mankodi*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Tubers are used as a staple food. Roasted or cooked tubers are eaten.  
Ethnoecological knowledge : It is seen in the wasteland.  
Other information : Nil.

80. Scientific name : ***Dioscorea tomentosa* J. Koenig ex Spreng.**  
Terminology of *Malasar* : '*Shjelukilangu*', '*Shjelushangu*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Tubers are used as a staple food. Roasted or cooked tubers are eaten.  
Ethnoecological knowledge : It is seen in the wasteland.  
Other information : Nil.

81. Scientific name	:	<b><i>Dioscorea wallichii</i> Hook. f.</b>
Terminology of <i>Malasar</i>	:	'Naarukilangu', 'Naarushangu'
Ethnomedicinal knowledge	:	Nil.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Tubers are used as a staple food. Roasted or cooked tubers are eaten.
Ethnoecological knowledge	:	It is seen in the wasteland.
Other information	:	Nil.

### **Euphorbiaceae**

82. Scientific name	:	<b><i>Euphorbia hirta</i> L.</b>
Terminology of <i>Malasar</i>	:	'Murikootti'
Ethnomedicinal knowledge	:	Leaves used as medicine to cure the wound.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Nil.
Ethnoecological knowledge	:	It is seen in the wasteland.
Other information	:	Nil.

83. Scientific name	:	<b><i>Manihot esculenta</i> Crantz</b>
Terminology of <i>Malasar</i>	:	'Poolakilangu'
Ethnomedicinal knowledge	:	Nil.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Tubers are used as a staple food. Roasted or cooked tubers are eaten.
Ethnoecological knowledge	:	Cultivated near to hut.
Other information	:	Nil.

84. Scientific name	:	<b><i>Ricinus communis</i> L.</b>
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Terminology of *Malasar* : 'Avanakku'  
 Ethnomedicinal knowledge : Tender leaves used for jaundice.  
 Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : Nil.  
 Ethnoecological knowledge : Seen in waste lands.  
 Other information : Nil.

### **Fabaceae**

85. Scientific name : ***Acacia caesia* (L.) Willd.**  
 Terminology of *Malasar* : 'Inja'  
 Ethnomedicinal knowledge : Nil.  
 Ethnoeconomical knowledge : Bark is MFP.  
 Ethnolivelihood knowledge : Bark is used to bath instead of soap.  
 Ethnoecological knowledge : Nil.  
 Other information : The season of 'Inja' harvesting is January to February.

86. Scientific name : ***Bauhinia racemosa* Lam.**  
 Terminology of *Malasar* : 'Kudakampuli'  
 Ethnomedicinal knowledge : Nil.  
 Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : Ripened fruits are eaten. Tender shoots and leaves are given to livestock.  
 Ethnoecological knowledge : Seen in 'Veyilkaad' (Dry deciduous forest)  
 Other information : Nil.

87. Scientific name : ***Clitoria ternatea* L.**  
 Terminology of *Malasar* : 'Sankupushpum'  
 Ethnomedicinal knowledge : Whole plant used as medicine for bronchitis.

Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Seen in everywhere.  
Other information : Nil.

88. Scientific name : ***Dalbergia latifolia Roxb.***  
Terminology of *Malasar* : 'Veetti'  
Ethnomedicinal knowledge : Bark used as medicine for inducing sterility and cure stomach ache.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Seen in '*Veyilkaad*' (Dry deciduous forest)  
Other information : Nil.

89. Scientific name : ***Desmodium gangeticum (L.) DC.***  
Terminology of *Malasar* : 'Orela'  
Ethnomedicinal knowledge : Root used as a medicine for rheumatism.  
Ethnoeconomical knowledge : Whole plant is MFP.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Seen in '*Malakkad*' (Evergreen forest).  
Other information : Nil.

90. Scientific name : ***Dolichos trilobus L.***  
Terminology of *Malasar* : '*Kaattavarai*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Tender fruit are used as vegetable.  
Ethnoecological knowledge : Seen in '*Malakkad*' (Evergreen forest).

- Other information : Nil.
91. Scientific name : ***Entada rheedii Spreng.***
- Terminology of *Malasar* : 'Thaylakaay'
- Ethnomedicinal knowledge : Against body and stomach pain, the cotyledons of the dried seed are eaten.
- Ethnoeconomical knowledge : Nil.
- Ethniclivelihood knowledge : Nil.
- Ethnoecological knowledge : Woody climber, distributed in evergreen forest.
- Other information : Nil.
92. Scientific name : ***Erythrina variegata L.***
- Terminology of *Malasar* : 'Mullumurik'
- Ethnomedicinal knowledge : Nil.
- Ethnoeconomical knowledge : Nil.
- Ethniclivelihood knowledge : Tender shoot and leaves given to livestock.
- Ethnoecological knowledge : Seen in 'Veyilkaad' (Dry deciduous forest)
- Other information : Nil.
93. Scientific name : ***Gliricidia sepium (Jacq.) Walp.***
- Terminology of *Malasar* : 'Seema konna'
- Ethnomedicinal knowledge : Nil.
- Ethnoeconomical knowledge : Nil.
- Ethniclivelihood knowledge : Tender shoot and leaves given to livestock.
- Ethnoecological knowledge : Seen in 'Veyilkaad' (Dry deciduous forest)
- Other information : Nil.

94. Scientific name : ***Mimosa pudica* L.**  
Terminology of *Malasar* : 'Thottavaadi' / 'Thottasukki'  
Ethnomedicinal knowledge : Whole plant is used for head ache.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : It seen in good soil.  
Other information : Nil.

95. Scientific name : ***Pongamia pinnata* (L.) Pierre**  
Terminology of *Malasar* : 'Punku'  
Ethnomedicinal knowledge : Ground leaves are used to cure headaches. Boiled water with the bark is used to bath for curing body pain.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : It seen in good soil.  
Other information : Nil.

96. Scientific name : ***Pithecellobium dulce* (Roxb.) Benth.**  
Terminology of *Malasar* : 'Pulipalam'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Ripened fruits are eaten.  
Ethnoecological knowledge : Seen in 'Veyilkaad' (Dry deciduous forest)  
Other information : Nil.

97. Scientific name : ***Pseudarthria viscida* (L.) Wight & Arn.**  
Terminology of *Malasar* : 'Mukala'  
Ethnomedicinal knowledge : Whole plant is useful in cough and asthma.

Ethnoeconomical knowledge : Nil.  
 Ethnoliveliness knowledge : Nil.  
 Ethnological knowledge : It is seen in '*Veyilkaad*' (Dry deciduous forest) and wastelands.  
 Other information : Nil.

98. Scientific name : ***Pterocarpus marsupium* Roxb.**  
 Terminology of *Malasar* : '*Venga*'  
 Ethnomedicinal knowledge : Bark is used to cure stomach ache with indigestion, rheumatic fever and body pain. Resin is used as a medicine to cure wound. Bark of the tree used to cure scurf in babies. The juice from the bark mixed with rice flour and cooked without salt is medicine to strengthen the backbone.

Ethnoeconomical knowledge : Nil.  
 Ethnoliveliness knowledge : The resin is used as kumkkumam.  
 Ethnological knowledge : Seen in '*Veyilkaad*' (Dry deciduous forest)  
 Other information : Nil.

99. Scientific name : ***Senna occidentalis* (L.)**  
 Terminology of *Malasar* : '*Kolthakara*'  
 Ethnomedicinal knowledge : Nil.  
 Ethnoeconomical knowledge : Nil.  
 Ethnoliveliness knowledge : Leaves are used as vegetable.  
 Ethnological knowledge : Seen in roadside and wastelands.  
 Other information : Nil.

100. Scientific name : ***Senna tora* (L.) Roxb.**  
 Terminology of *Malasar* : '*Chakkarathakara*', '*Sattithakara*'

Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Leaves are used as vegetable.  
Ethnoecological knowledge : Seen in roadside and wastelands.  
Other information : Nil.

101. Scientific name : ***Sesbania grandiflora* (L.) Pers.**  
Terminology of *Malasar* : '*Agathilakri*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Leaves are used as vegetable.  
Ethnoecological knowledge : Seen in wastelands.  
Other information : Nil.

102. Scientific name : ***Spatholobus parviflorus* (DC.) Kuntze.**  
Terminology of *Malasar* : '*Pannimuttaal sangu*'.  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Tender shoot and leaves given to livestock.  
Ethnoecological knowledge : The tuber is a staple food for wild boar. The flowering season is march.  
Other information : Nil.

103. Scientific name : ***Tamarindus indica* L.**  
Terminology of *Malasar* : '*Pulinjikuru*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.

Ethnic knowledge : Fruits are used as an ingredient in curry for sourness.  
 Ethnoecological knowledge : The honey will have a peculiar smell when the tamarind tree flowering.  
 Other information : Nil.

104. Scientific name : ***Vachellia nilotica* (L.) P. J. H. Hurter & Mabb.**  
 Terminology of *Malasar* : '*Karivelum*'  
 Ethnomedicinal knowledge : Bark is used to cure tooth ache.  
 Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : Nil.  
 Ethnoecological knowledge : Seen in '*Veyilkaad*' (Dry deciduous forest)  
 Other information : Nil.

105. Scientific name : ***Vigna unguiculata* (L.) Walp.**  
 Terminology of *Malasar* : '*Thanangani*'  
 Ethnomedicinal knowledge : Nil.  
 Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : Leaves are used as vegetable.  
 Ethnoecological knowledge : Seen in wastelands and cultivated near to hut.  
 Other information : Nil.

106. Scientific name : ***Xylia xylocarpa* (Roxb.) W. Toub.**  
 Terminology of *Malasar* : '*Trumullu*'  
 Ethnomedicinal knowledge : Nil.  
 Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : Dried seeds are raw eaten.  
 Ethnoecological knowledge : Seen in road side.  
 Other information : Nil.

### **Hypoxidaceae**

107. Scientific name	:	<b><i>Curculigo orchioides</i> Gaertn.</b>
Terminology of <i>Malasar</i>	:	' <i>Nilappana</i> '
Ethnomedicinal knowledge	:	Root stock used for Leukorrhea.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Nil.
Ethnoecological knowledge	:	Seen in open areas in forest.
Other information	:	Nil.

### **Lamiaceae**

108. Scientific name	:	<b><i>Coleus barbatus</i> (Andrews) Benth. ex G. Don</b>
Terminology of <i>Malasar</i>	:	' <i>Kanakoorka</i> '
Ethnomedicinal knowledge	:	Juice of leaves used for cough.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Nil.
Ethnoecological knowledge	:	Planted near to hut.
Other information	:	Nil.

109. Scientific name	:	<b><i>Leucas aspera</i> (Willd.) Link</b>
Terminology of <i>Malasar</i>	:	' <i>Thumba</i> '
Ethnomedicinal knowledge	:	An antipyretic.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Nil.
Ethnoecological knowledge	:	Seen in open areas and wetlands.
Other information	:	Nil.



110. Scientific name : ***Ocimum tenuiflorum L.***  
Terminology of *Malasar* : 'Thulasi'  
Ethnomedicinal knowledge : Leaves used for cough and cold.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Seen in open areas and also planted near to hut.  
Other information : Nil.

111. Scientific name : ***Vitex negundo L.***  
Terminology of *Malasar* : 'Karinochi'  
Ethnomedicinal knowledge : Tender leaves used for teeth ache.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Planted near to hut.  
Other information : Nil.

### **Loganiaceae**

112. Scientific name : ***Strychnos nux-vomica L.***  
Terminology of *Malasar* : 'Mazhukanjiram'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : The bark used to kill dogs. The wood is used to make axe and bullock cart.  
Ethnoecological knowledge : Nil.  
Other information : Poisonous.

## Malvaceae

113. Scientific name : ***Helicteres isora* L.**  
Terminology of *Malasar* : '*Edampiri-Valampiri*'  
Ethnomedicinal knowledge : Fruit used to cure dysentery.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Seen in '*Veyilkkad*' (dry deciduous forest) and '*Malakkad*' (Evergreen Forest).  
Other information : Nil.

114. Scientific name : ***Thespesia populnea* (L.) Sol. ex Corrêa**  
Terminology of *Malasar* : '*Poovarasu*'  
Ethnomedicinal knowledge : Bark of the tree used for scurf in babies.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Seen in roadside.  
Other information : Nil.

115. Scientific name : ***Sida alnifolia* L.**  
Terminology of *Malasar* : '*Kurunthotti*'  
Ethnomedicinal knowledge : Whole plant used for hair growth.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : It is the food plant of wild gaur.  
Other information : Nil.

116. Scientific name : ***Sida rhombifolia* L.**  
Terminology of *Malasar* : '*Kurunthotti*'

Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Whole plant used for hair growth.  
Ethnoecological knowledge : It is the food plant of wild gaur.  
Other information : Nil.

### **Marsileaceae**

117. Scientific name : ***Marsilea minuta L.***  
Terminology of *Malasar* : 'Aralakri'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Leaves are used as vegetables.  
Ethnoecological knowledge : Seen in banks of reservoir.  
Other information : Nil.

### **Meliaceae**

118. Scientific name : ***Azadirachta indica A. Juss.***  
Terminology of *Malasar* : 'Veppu'  
Ethnomedicinal knowledge : Grinded leaves of the plant and turmeric is the best medicine for itching.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : The honey will have a peculiar smell when the Indian lilac tree flowering.  
Other information : Leaves are used in temple.

### **Menispermaceae**

119. Scientific name : ***Cissampelos Pareira L.***

Terminology of *Malasar* : '*Janamkolli*'  
 Ethnomedicinal knowledge : Tuber or mature stem used as medicine for colic, fever, and cough.  
 Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : Nil.  
 Ethnoecological knowledge : Seen in roadside and '*Malakkad*' (Evergreen forest).  
 Other information : Nil.

120. Scientific name : ***Tinospora cordifolia* (Willd.) Hook. f. & Thomson**  
 Terminology of *Malasar* : '*Chittamruth*'  
 Ethnomedicinal knowledge : Juice of green vine with raw honey is a remedy for fever and coryza.  
 Ethnoeconomical knowledge : They collect for selling to the medicine makers.  
 Ethnolivelihood knowledge : Nil.  
 Ethnoecological knowledge : Collecting from '*Malakkad*' (Evergreen forest).  
 Other information : Nil.

### **Moraceae**

121. Scientific name : ***Artocarpus heterophyllus* Lam.**  
 Terminology of *Malasar* : '*Sakkaipalam*'  
 Ethnomedicinal knowledge : Nil.  
 Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : Tender fruits are used as vegetable. Its seeds are used for cooking and ripened fruits are eaten. Tender shoot and leaves given to livestock.  
 Ethnoecological knowledge : Seen in '*Malaakkad*' and near to hamlet.  
 Other information : Nil.

122. Scientific name : ***Artocarpus hirsutus* Lam.**

Terminology of *Malasar* : '*Ayannisakkaipalam*'  
 Ethnomedicinal knowledge : Nil.  
 Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : Riped fruits are eaten. Cooked or roasted seeds are eaten.  
 Ethnoecological knowledge : Seen in '*Malakkad*' (Evergreen forest).  
 Other information : Nil.

123. Scientific name : ***Ficus benghalensis L.***  
 Terminology of *Malasar* : '*Uzhiyaal*'  
 Ethnomedicinal knowledge : Nil.  
 Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : Nil.  
 Ethnic knowledge : The *Malasar* use the aerial roots of this tree for making swings.  
 Ethnoecological knowledge : Hornbills, doves, myna, barbets, babblers, and other birds  
 Other information : Nil.

124. Scientific name : ***Ficus racemosa L.***  
 Terminology of *Malasar* : '*Athi*'  
 Ethnomedicinal knowledge : Nil.  
 Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : Fruits are edible. Tender shoot and leaves given to livestock.  
 Ethnoecological knowledge : Seen in water available areas and fruits are eaten by birds.  
 Other information : Nil.

125. Scientific name	:	<b><i>Ficus religiosa</i> L.</b>
Terminology of <i>Malasar</i>	:	'Aal'
Ethnomedicinal knowledge	:	Nil.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Nil.
Ethnoecological knowledge	:	fruits are eaten by birds.
Other information	:	They consider the tree as sacred tree.

### **Moringaceae**

126. Scientific name	:	<b><i>Moringa oleifera</i> Lam.</b>
Terminology of <i>Malasar</i>	:	'Muringai'
Ethnomedicinal knowledge	:	Leaves increases blood level.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Leaves, fruits, and flowers used as vegetable.
Ethnoecological knowledge	:	They cultivated near to their huts.
Other information	:	Nil.

### **Musaceae**

127. Scientific name	:	<b><i>Ensete superbum</i> (Roxb.) Cheesman</b>
Terminology of <i>Malasar</i>	:	'Kalluvazha'
Ethnomedicinal knowledge	:	Seed is used for urinary disorders and piles.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Tender pith ( <i>unnithandu</i> ) is used as vegetable. Ripened fruit are eaten.
Ethnoecological knowledge	:	Seen in ' <i>Malakkad</i> ' (Evergreen forest)
Other information	:	Nil.

## Myrtaceae

128. Scientific name	:	<b><i>Psidium guajava</i> L.</b>
Terminology of <i>Malasar</i>	:	' <i>Koyyakaayi</i> '
Ethnomedicinal knowledge	:	Nil.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Leaves used for mouth cleaning. Fruits are edible.
Ethnoecological knowledge	:	Small tree. Distributed in semi evergreen and open plains.
Other information	:	Nil.

129. Scientific name	:	<b><i>Syzygium cumini</i> (L.) Skeels.</b>
Terminology of <i>Malasar</i>	:	' <i>Njava</i> '
Ethnomedicinal knowledge	:	Nil.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Ripened fruits are edible.
Ethnoecological knowledge	:	Seen in ' <i>Malakkad</i> ' (Evergreen forest).
Other information	:	Nil.

130. Scientific name	:	<b><i>Syzygium densiflorum</i> Wall. ex Wt. &amp; Arn.</b>
Terminology of <i>Malasar</i>	:	' <i>Cherunjava</i> '
Ethnomedicinal knowledge	:	Nil.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Ripened fruits are edible.
Ethnoecological knowledge	:	Seen in ' <i>Malakkad</i> ' (Evergreen forest).
Other information	:	Nil.

## Nyctaginaceae

131. Scientific name	:	<b><i>Boerhavia diffusa</i> L.</b>
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Terminology of <i>Malasar</i>	:	' <i>Thamizhama</i> ' / ' <i>Komanamberilakri</i> '
Ethnomedicinal knowledge	:	Whole plant used for swelling.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Leaves used to make curry.
Ethnoecological knowledge	:	Seen in wasteland.
Other information	:	Nil.

### **Oxalidaceae**

132. Scientific name	:	<b><i>Oxalis corniculata</i> L.</b>
Terminology of <i>Malasar</i>	:	' <i>Pulilakri</i> '
Ethnomedicinal knowledge	:	Nil.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Used to make curry.
Ethnoecological knowledge	:	Seen in wetlands.
Other information	:	Nil.

### **Pandanaceae**

133. Scientific name	:	<b><i>Pandanus foetidus</i> Roxb.</b>
Terminology of <i>Malasar</i>	:	' <i>Kaithauzhi</i> '
Ethnomedicinal knowledge	:	The prop root used for rheumatic pain.
Ethnoeconomical knowledge	:	The prop root collecting as MFP.
Ethniclivelihood knowledge	:	Nil.
Ethnoecological knowledge	:	Seen in side of stream.
Other information	:	Nil.

### **Passifloraceae**

134. Scientific name	:	<b><i>Adenia hondala</i> (Gaertn.) W. J. de Wilde</b>
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Terminology of *Malasar* : '*Kannanchirattalakri*'  
 Ethnomedicinal knowledge : Nil.  
 Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : Tender leaves used as vegetable.  
 Ethnoecological knowledge : Seen in wetland and wasteland.  
 Other information : Nil.

### **Phyllanthaceae**

135. Scientific name : ***Antidesma acidum* Retz.**  
 Terminology of *Malasar* : '*Kambilipulipalam*'  
 Ethnomedicinal knowledge : Nil.  
 Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : Ripende fruits are raw eaten.  
 Ethnoecological knowledge : Seen in '*Malakkad*' (Evergreen forest).  
 Other information : Nil.

136. Scientific name : ***Baccaurea courtallensis* (Wight) Müll. Arg.**  
 Terminology of *Malasar* : '*Mootilpazham*'  
 Ethnomedicinal knowledge : Nil.  
 Ethnoeconomical knowledge : Nil.  
 Ethnolivelihood knowledge : Ripened fruits are usually edible.  
 Ethnoecological knowledge : Small tree, '*Malakkad*' (Evergreen forest)  
 Other information : Nil.

137. Scientific name : ***Bridelia retusa* (L.) A. Juss.**  
 Terminology of *Malasar* : '*Mulluvenga*'  
 Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.  
 Ethnoliveliness knowledge : Ripende fruits are raw eaten.  
 Ethnobotanical knowledge : Seen in '*Veyilkaad*' (Dry deciduous forest).  
 Other information : Nil.

138. Scientific name : ***Phyllanthus emblica* L.**  
 Terminology of *Malasar* : '*Nellika*'  
 Ethnomedicinal knowledge : Fruit used for hair growth.  
 Ethnoeconomical knowledge : Collecting as MFP.  
 Ethnoliveliness knowledge : Fruits are used to make pickle.  
 Ethnobotanical knowledge : Small to medium tree, distributed in dry and moist deciduous forest  
 Other information : Nil.

139. Scientific name : ***Sauropus quadrangularis* (Willd.) Müll. Arg.**  
 Terminology of *Malasar* : '*Kurumurangai*'  
 Ethnomedicinal knowledge : Nil.  
 Ethnoeconomical knowledge : Nil.  
 Ethnoliveliness knowledge : Tender stem and leaves used as leafy vegetable.  
 Ethnobotanical knowledge : Seen in '*Malakkad*' (Evergreen forest).  
 Other information : Nil.

### **Piperaceae**

140. Scientific name : ***Peperomia pellucida* (L.) Kunth**  
 Terminology of *Malasar* : '*Vellathandu*'  
 Ethnomedicinal knowledge : Leaves and stem used as medicine for cold.  
 Ethnoeconomical knowledge : Nil.  
 Ethnoliveliness knowledge : Nil.

Ethnoecological knowledge : Seen in '*Malakkad*' (Evergreen forest).  
Other information : Nil.

141. Scientific name : ***Piper betle* L.**  
Terminology of *Malasar* : '*Vettila*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Leaves are an element of mixture for mastication.  
Ethnoecological knowledge : Cultivated near to hut.  
Other information : Nil.

142. Scientific name : ***Piper longum* L.**  
Terminology of *Malasar* : '*Thippali*'  
Ethnomedicinal knowledge : Whole plant used as medicine against toothache, cough and cold.  
Ethnoeconomical knowledge : Whole plant used as MFP.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Distributed in semi - evergreen and evergreen forests.  
Other information : Nil.

143. Scientific name : ***Piper mullesua* Buch.-Ham. ex D. Don**  
Terminology of *Malasar* : '*Kattukurumulak*'  
Ethnomedicinal knowledge : Seed, leaves, shoot, and stem used as medicine for fever, cough, and cold.  
Ethnoeconomical knowledge : Dried fruits are MFP.  
Ethniclivelihood knowledge : Dried fruits are used as spices.  
Ethnoecological knowledge : Climbing shrub. Distributed in evergreen forest.  
Other information : Nil.

144. Scientific name : ***Piper nigrum L.***  
Terminology of *Malasar* : '*Kurumulakai*'  
Ethnomedicinal knowledge : Dried fruit used as medicine for fever, cough, and cold.  
Ethnoeconomical knowledge : Dried fruits are MFP.  
Ethniclivelihood knowledge : Dried fruits are used as spices.  
Ethnoecological knowledge : Seen in evergreen and semi- evergreen forests, also cultivated.  
Other information : Nil.

### **Poaceae**

145. Scientific name : ***Eleusine coracana (L.) Gaertn.***  
Terminology of *Malasar* : '*Kora*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnic knowledge : Seeds used as grains.  
Ethnoecological knowledge : Seen in waste lands and wet areas.  
Other information : Nil.

146. Scientific name : ***Bambusa bambos (L.) Voss***  
Terminology of *Malasar* : '*Mula*'  
Ethnomedicinal knowledge : The crushed tender shoot boiled with water is a medicine used to drink for abortion.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Seed and tender shoot are used as food. Stem is used to making traditional bench and hut. Tender shoot and leaves given to livestock.

Ethnoecological knowledge : The flowering time of bamboo leads to increase the population of rats. The abundance of food (bamboo rice) is the reason for this.

Other information : Nil.

### **Polygonaceae**

147. Scientific name : ***Persicaria chinensis* (L.) H. Gross**

Terminology of *Malasar* : '*Odimadavalinalakri*'

Ethnomedicinal knowledge : Tender stem and leaves used as vegetable.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Nil.

Ethnoecological knowledge : Seen in banks of dam and waste lands.

Other information : Nil.

### **Portulacaceae**

148. Scientific name : ***Portulaca oleracea* L.**

Terminology of *Malasar* : '*Thammaikelanthan*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Tender stem and leaves used as vegetable.

Ethnoecological knowledge : Seen in banks of dam and wasteland.

Other information : Nil.

### **Ranunculaceae**

149. Scientific name : ***Clematis zeylanica* (L.) Poir.**

Terminology of *Malasar* : '*Vathakodi*'

Ethnomedicinal knowledge : Leaves and stem are medicine to cure rheumatism.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : The plants are seen in in plains.  
Other information : Nil.

### **Rhamnaceae**

150. Scientific name : ***Ziziphus glabrata* (B.Heyne ex Schult.) B. Heyne ex Wight & Arn.**

Terminology of *Malasar* : '*Kottamaram*'

Ethnomedicinal knowledge : Bark is used for wound healing.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Nil.

Ethnoecological knowledge : It seen in '*Veyilkaad*' (Dry deciduous forest)

Other information : Nil.

151. Scientific name : ***Ziziphus mauritiana* Lam.**

Terminology of *Malasar* : '*Peumsooripalam*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Ripened fruits are eaten.

Ethnoecological knowledge : It seen in '*Veyilkaad*' (Dry deciduous forest)

Other information : Nil.

152. Scientific name : ***Ziziphus oenoplia* (L.) Miller**

Terminology of *Malasar* : '*Sooripalam*' / '*Chodalimullu*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Ripened fruits are eaten.

Ethnoecological knowledge : It seen in '*Veyilkaad*' (Dry deciduous forest)

Other information : Nil.

153. Scientific name : ***Ziziphus rugosa* Lam.**

Terminology of *Malasar* : '*Kottalaipalam*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Ripened fruits are eaten.

Ethnoecological knowledge : It seen in '*Veyilkaad*' (Dry deciduous forest)

Other information : Nil.

### **Rosaceae**

154. Scientific name : ***Rubus glomeratus* Bl.**

Terminology of *Malasar* : '*Mullurojapalam*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Ripened fruits are eaten.

Ethnoecological knowledge : Seen in '*Veyilkaad*' (Dry deciduous forest)

Other information : Nil.

### **Rubiacea**

155. Scientific name : ***Tamilnadia uliginosa* (Retz.) Tirveng. & Sastre**

Terminology of *Malasar* : '*Kalikarai*'

Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Tender fruits are used as vegetable.

Ethnoecological knowledge : It seen in '*Veyilkaad*' (Dry deciduous forest)

Other information : Nil.

## **Rutaceae**

156. Scientific name : ***Glycosmis pentaphylla* (Retz.) DC.**  
Terminology of *Malasar* : '*Pana*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Ripened fruits are eaten.  
Ethnoecological knowledge : The ripened fruits are eaten by sloth bear  
Other information : Nil.

## **Salicaceae**

157. Scientific name : ***Flacourtia montana* J. Graham**  
Terminology of *Malasar* : '*Chalirupalam*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Fruit used to making pickle.  
Ethnoecological knowledge : Seen in '*Malakkad*' (Evergreen forest).  
Other information : Nil.

158. Scientific name : ***Scolopia crenata* (Wight & Arn.) Clos**  
Terminology of *Malasar* : '*Chithalipalam*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Ripened fruits are eaten.  
Ethnoecological knowledge : Seen in '*Malakkad*' (Evergreen forest).  
Other information : Nil.



### **Sapindaceae**

159. Scientific name	:	<b><i>Cardiospermum halicacabum</i> L.</b>
Terminology of <i>Malasar</i>	:	'Niravalli' / 'Uzhinja'
Ethnomedicinal knowledge	:	Whole plant without roots used for hair cleaning & hair growth.
Ethnoeconomical knowledge	:	It is an MFP. They collect the plant for medicine makers.
Ethniclivelihood knowledge	:	Nil.
Ethnoecological knowledge	:	Seen in wasteland.
Other information	:	Nil.

### **Sapotaceae**

160. Scientific name	:	<b><i>Madhuca longifolia</i> (J. Koenig ex L.) J. F. Macbr.</b>
Terminology of <i>Malasar</i>	:	'Pala palam'
Ethnomedicinal knowledge	:	Nil.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Ripened fruits are eaten.
Ethnoecological knowledge	:	Seen in ' <i>Malakkad</i> ' (Evergreen forest).
Other information	:	Nil.

161. Scientific name	:	<b><i>Mimusops elengi</i> L.</b>
Terminology of <i>Malasar</i>	:	'Ilanchi'
Ethnomedicinal knowledge	:	Nil.
Ethnoeconomical knowledge	:	Nil.
Ethniclivelihood knowledge	:	Ripened fruits are eaten.
Ethnoecological knowledge	:	Seen in ' <i>Malakkad</i> ' (Evergreen forest).
Other information	:	Nil.

162. Scientific name : ***Palaquium ellipticum (Dalzell) Baill.***  
Terminology of *Malasar* : 'Paali'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Ripened fruits are eaten.  
Ethnoecological knowledge : Seen in '*Malakkad*' (Evergreen forest).  
Other information : Nil.

### **Solanacea**

163. Scientific name : ***Capsicum frutescens L.***  
Terminology of *Malasar* : '*Kanthari*'  
Ethnomedicinal knowledge : Used for the remedy to cure blood pressure.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Fruit makes the curry spicy.  
Ethnoecological knowledge : Seen in '*Malakkad*' (Evergreen forest).  
Other information : Nil.

164. Scientific name : ***Datura metel L.***  
Terminology of *Malasar* : '*Oomanthai*'  
Ethnomedicinal knowledge : Fruit juice used for hair fall & dandruff.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : seen in road side.  
Other information : Nil.

165. Scientific name : ***Nicotiana tabacum L.***

Terminology of *Malasar* : '*Pokala*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Leaves are used for mastication.  
Ethnoecological knowledge : Nil  
Other information : Nil.

166. Scientific name : ***Physalis angulata L.***  
Terminology of *Malasar* : '*Pottaari*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Ripened fruits are eaten.  
Ethnoecological knowledge : Seen in '*Malakkad*' (Evergreen forest).  
Other information : Nil.

167. Scientific name : ***Solanum americanum Mill.***  
Terminology of *Malasar* : '*Sukkuttikeera*' / '*Sukkutilakri*'  
Ethnomedicinal knowledge : The leaves and the fruits are medicine for stomach ache and ulcer.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Ripened fruits are eaten. Tender stem and leaves used as vegetables.  
Ethnoecological knowledge : Seen in '*Malakkad*' (Evergreen forest).  
Other information : Nil.

168. Scientific name : ***Solanum lycopersicum L.***  
Terminology of *Malasar* : '*Thakkali*'  
Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Fruit used as vegetable.  
Ethnoecological knowledge : Seen in '*Malakkad*' (Evergreen forest).  
Other information : Nil.

169. Scientific name : ***Solanum melongena L.***  
Terminology of *Malasar* : '*Kathiri*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Fruit used as vegetable.  
Ethnoecological knowledge : Seen in '*Malakkad*' (Evergreen forest).  
Other information : Nil.

170. Scientific name : ***Solanum torvum Sw.***  
Terminology of *Malasar* : '*Sunda*'  
Ethnomedicinal knowledge : Fruits can cure digestive problems.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : The tender fruits are used as vegetables.  
Ethnoecological knowledge : Seen in near to hut.  
Other information : Nil.

### **Sterculiaceae**

171. Scientific name : ***Sterculia foetida L.***  
Terminology of *Malasar* : '*Kaavala*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Cotyledons of roasted seeds are eaten.

Ethnoecological knowledge : It seen in '*Veyilkaad*' (Dry deciduous forest).  
Other information : Nil.

### **Urticacea**

172. Scientific name : ***Dendrocnide sinuata* (Bl.) Chew**  
Terminology of *Malasar* : '*Aanaveratti*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : It seen in '*Nallakaadu*' (Rainforest) and '*Malakaadu*' (Evergreen forest).  
Other information : The name Aanaveratti is derived from the knowledge that we cannot touch the plant due to its cause of tching. Even the elephants (Aana) too are not safe from its itching.

173. Scientific name : ***Laportea interrupta* (L.) Chew.**  
Terminology of *Malasar* : '*Thuvalakri*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Leaves used as a vegetable.  
Ethnoecological knowledge : It seen in wasteland.  
Other information : Touching the plant causes itch.

### **Verbenaceae**

174. Scientific name : ***Lantana camara* L.**  
Terminology of *Malasar* : '*Kongini*', '*Aripalam*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.

Ethniclivelihood knowledge : Ripened fruits are eaten.  
Ethnoecological knowledge : Distributes near to hamlets.  
Other information : Nil.

### **Zingiberaceae**

175. Scientific name : ***Curcuma zedoaria* (Christm.) Roscoe**  
Terminology of *Malasar* : '*Maanginji*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Rhizome used for pickle.  
Ethnoecological knowledge : Seen in open areas of forest  
Other information : Nil.

176. Scientific name : ***Zingiber neesatum* (J. Graham) Ramamoorthy**  
Terminology of *Malasar* : '*Malayinji*'  
Ethnomedicinal knowledge : Rhizome used against cough and cold.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Rhizome is used in curry.  
Ethnoecological knowledge : Seen in open areas of forest  
Other information : Nil.

177. Scientific name : ***Zingiber officinale* Roscoe**  
Terminology of *Malasar* : '*Inji*'  
Ethnomedicinal knowledge : Rhizome used against cough and cold.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Rhizome is used in curry.  
Ethnoecological knowledge : Cultivated near to hut

Other information : Nil.

### **III.b. Gymnosperms**

#### **Cycadaceae**

178. Scientific name : *Cycas circinalis* L.  
Terminology of *Malasar* : 'Eenthu'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Tender leaves are used to make curry. Flour from stem pith and seed is used to make pudding and pancake.  
Ethnoecological knowledge : Seen in open areas.  
Other information : Leaves are used to decorate their hut and marquee for the ceremony.

### **III.c. Fungi**

#### **Agaricaceae**

179. Scientific name : *Lycoperdon perlatum* Pers. 1796  
Terminology of *Malasar* : 'Panthrakelan'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Pileus and stipes used as vegetable.  
Ethnoecological knowledge : It collects during the monsoon season.  
Other information : Nil.

#### **Auriculariaceae**

180. Scientific name : *Auricularia* sp.  
Terminology of *Malasar* : 'Kathu kelan'  
Ethnomedicinal knowledge : Nil.

Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Pileus and stipes used as vegetable.  
Ethnoecological knowledge : It collects during the monsoon season.  
Other information : Nil.

181. Scientific name : ***Termitomyces microcarpus* (Berk and Br.) Helim.**  
Terminology of *Malasar* : '*Arikegal*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Pileus and stipes used as vegetable.  
Ethnoecological knowledge : It collects during the monsoon season.  
Other information : Nil.

182. Scientific name : ***Termitomyces eurhizus* (Berk) Him.**  
Terminology of *Malasar* : '*Aanamethiyankegal*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Pileus and stipes used as vegetable.  
Ethnoecological knowledge : It collects during the monsoon season.  
Other information : Nil.

### **Pleurotaceae**

183. Scientific name : ***Pleurotus ostreatus* (Jacq.) P. Kumm. 1870**  
Terminology of *Malasar* : '*Marakkegal*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Pileus and stipes used as vegetable.



Ethnoecological knowledge : It collects during the monsoon season.  
Other information : Nil.

184. Scientific name : ***Pleurotus sp.***  
Terminology of *Malasar* : '*Mungakegal*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Pileus and stipes used as vegetable.  
Ethnoecological knowledge : It collects during the monsoon season.  
Other information : Nil.

### **Pluteaceae**

185. Scientific name : ***Volvariella volvacea (Bull. Fr.) Singer***  
Terminology of *Malasar* : '*Vaikkakegal*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Pileus and stipes used as vegetable.  
Ethnoecological knowledge : It collects during the monsoon season.  
Other information : Nil.

### **III.d. Pteridophytes**

#### **Athyriaceae**

186. Scientific name : ***Diplazium esculentum (Retz.) Sw.***  
Terminology of *Malasar* : '*Surulilakri*'  
Ethnomedicinal knowledge : Nil.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : Tender leaves used as vegetable.

Ethnoecological knowledge : Seen in the bank of river or stream.

Other information : Nil.

## IV. Ethnic knowledge and Ethnoecological knowledge of faunal diversity by *Malasar* ethnic community

### IV.a. Mammals

#### Bovidae

1. Scientific name : *Bos gaurus*  
Terminology of *Malasar* : 'Pothu'  
Ethnomedicinal knowledge : The dried dung is used for hair growth.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : It's a preferred prey of tiger.  
Other information : Nil.

#### Cercopithecidae

2. Scientific name : *Rusa unicolor*  
Terminology of *Malasar* : 'Kadamai'  
Ethnomedicinal knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Nil.  
Other information : When we hear the sound of Sambar deer in the early morning; it is the sign of breastfeeding. After feeding the deer will hide their babies in the safe zone.

#### Elephantidae

3. Scientific name : *Elephas maximus*  
Terminology of *Malasar* : 'Aana'  
Ethnomedicinal knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Summer season elephants are spending most of the time in wetlands.

Other information : Tuskless male elephants are called as '*Mokkanavan*' in *Malasar* language

### **Felidae**

4. Scientific name : ***Panthera tigris***  
Terminology of *Malasar* : '*Kaduva*'  
Ethnomedicinal knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Wild gour is the preferred prey of tiger.  
Other information : When the time of hunting of deer, the jungle crow and the monkey will rise sounds. When we hear only the sound of the jungle crow, we can assume that the hunt is over.

### **Ursidae**

5. Scientific name : ***Melursus ursinus***  
Terminology of *Malasar* : '*Karadi*'  
Ethnomedicinal knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : Honey, fish, fruit of *Glycosmis pentaphylla* are the food of sloth bear.  
Other information : Nil.

## **IV.b. Birds**

### **Charadriidae**

6. Scientific name : ***Vanellus indicus***  
Terminology of *Malasar* : '*Aalkaati*'  
Ethnomedicinal knowledge : Nil.  
Ethniclivelihood knowledge : Nil.

Ethnoecological knowledge : It seen in the riverbank and swamp.  
Other information : Nil.

### **Coraciidae**

7. Scientific name : *Coracias benghalensis*  
Terminology of *Malasar* : 'Pokakkuruvi'  
Ethnomedicinal knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : It seen in the paddy field and swamp.  
Other information : Nil.

### **Pycnonotidae**

8. Scientific name : *Pycnonotus jocosus*  
Terminology of *Malasar* : 'Kondalathi'  
Ethnomedicinal knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : insects, caterpillars and larvas are the staple.  
Other information : Nesting is in shrubs.

## **IV.c. Fishes**

### **Balitoridae**

9. Scientific name : *Homaloptera montana*  
Terminology of *Malasar* : 'Olivaati'  
Ethnomedicinal knowledge : Nil.  
Ethniclivelihood knowledge : Nil.  
Ethnoecological knowledge : It is seen in between rocks in the streams.  
Other information : Nil.

## **Cyprinidae**

10. Scientific name	:	<i>Dawkinsia assimilis</i>
Terminology of <i>Malasar</i>	:	'Punnukuthi'
Ethnomedicinal knowledge	:	Nil.
Ethniclivelihood knowledge	:	Used for cooking.
Ethnoecological knowledge	:	These fish eat away dead skin found on people's feet newer skin is exposed.
Other information	:	Nil.

11. Scientific name	:	<i>Dawkinsia filamentosa</i>
Terminology of <i>Malasar</i>	:	'Punnukuthi'
Ethnomedicinal knowledge	:	Nil.
Ethniclivelihood knowledge	:	Used for cooking.
Ethnoecological knowledge	:	These fish eat away dead skin found on people's feet newer skin is exposed.
Other information	:	Nil.

12. Scientific name	:	<i>Garra mullya</i>
Terminology of <i>Malasar</i>	:	'Kalloti'
Ethnomedicinal knowledge	:	Nil.
Ethniclivelihood knowledge	:	Nil.
Ethnoecological knowledge	:	Seen in between rocks. These fish eat away dead skin found on people's feet newer skin is exposed.
Other information	:	Nil.

## **Mastacembelidae**

13. Scientific name	:	<i>Macrogathus malabaricus</i>
Terminology of <i>Malasar</i>	:	'Aaral', 'Paambumeen'

Ethnomedicinal knowledge : It considers a medicine for body fitness.  
 Ethnoliveliness knowledge : It is used for cooking.  
 Ethnoecological knowledge : It looks like a snake.  
 Other information : Nil.

14. Scientific name : *Mastacembelus armatus*  
 Terminology of *Malasar* : 'Aaral', 'Paambumeen'  
 Ethnomedicinal knowledge : It considers a medicine for body fitness.  
 Ethnoliveliness knowledge : It is used for cooking.  
 Ethnoecological knowledge : It looks like a snake.  
 Other information : Nil.

#### **IV.d. Insects and Others**

##### **Apidae**

15. Scientific name : *Apis cerana indica*  
 Terminology of *Malasar* : 'Kurunthen'  
 Ethnomedicinal knowledge : Honey is used as medicine for all kinds of diseases.  
 Ethnoeconomical knowledge : Honey is MFP.  
 Ethnoliveliness knowledge : The honey used as food  
 Ethnoecological knowledge : Hive building is on tree holes  
 Other information : Nil.

16. Scientific name : *Apis dorsata dorsata*  
 Terminology of *Malasar* : 'Vanthen' / 'Malathen'  
 Ethnomedicinal knowledge : Honey is used as medicine for all kinds of diseases.  
 Ethnoeconomical knowledge : Honey is MFP.  
 Ethnoliveliness knowledge : The honey used as food

Ethnoecological knowledge : Its nesting on big trees.  
Other information : Nil.

17. Scientific name : *Apis florea fabricius*  
Terminology of *Malasar* : 'Kolthen'  
Ethnomedicinal knowledge : Honey is used as medicine for all kinds of diseases.  
Ethnoeconomical knowledge : Nil.  
Ethniclivelihood knowledge : The honey used as food  
Ethnoecological knowledge : Hive building is on small branches of shrubs or small trees.  
Other information : Nil.

18. Scientific name : *Tetragonula iridipennis*  
Terminology of *Malasar* : 'Koshuthen'  
Ethnomedicinal knowledge : Honey is used as medicine for all kinds of diseases.  
Ethnoeconomical knowledge : Honey is MFP.  
Ethniclivelihood knowledge : The honey used as food  
Ethnoecological knowledge : It lives in between rocks.  
Other information : Nil.



***Appendix III***

**List of important informants of Kadar ethnic community**

<b>Sl. No.</b>	<b>Name of the informant</b>	<b>Age</b>	<b>Name of the settlement</b>
1	Gangadharan	76	Kuriyarkutty
2	Omana	59	Kuriyarkutty
3	Harichadran	39	Kuriyarkutty
4	Ramayi	56	Kuriyarkutty
5	Nagamani	60	Kuriyarkutty
6	Jameela	45	Kuriyarkutty
7	Ponnukutty	65	Kuriyarkutty
8	Shailaj	26	Kuriyarkutty
9	Baby	24	Kuriyarkutty
10	Ramani	33	Kuriyarkutty
11	Sarojini	36	Kuriyarkutty
12	Thanga	55	Kuriyarkutty
13	Vijaya Kumari	49	Earth Dam colony
14	Jaya	85	Earth Dam colony
15	Venga/ Raman	72	Earth Dam colony
16	Chandra Kumari	47	Earth Dam colony
17	Selva Kumari	26	Earth Dam colony
18	Balachandran	28	Earth Dam colony
19	Kuttiamma	48	Earth Dam colony
20	Chellamma	39	Earth Dam colony
21	Uma Rani	45	Earth Dam colony
22	Raman	72	Earth Dam colony
23	Satheesh	60	Earth Dam colony
24	Girijan	35	Kadavu colony
25	Sajitha	30	Kadavu colony
26	Sumithra	27	Kadavu colony
27	Ramesh	29	Kadavu colony
28	Sunil	22	Kadavu colony
29	Ayyappan	28	Kadavu colony
30	Kumari	56	Thekkady
31	Perumal	67	Thekkady
32	Vasanthi	43	Thekkady
33	Selvan	22	Thekkady
34	Karappuswami	56	Erumapara
35	Pathmini	38	Erumapara
36	Valli	75	Erumapara
37	Bavas	70	Erumapara
38	Muthu	25	Erumapara
39	Mariyappan	44	Erumapara
40	Soumya	20	Erumapara
41	Ganesh	29	Erumapara
42	Meenakshiyamma	70	Erumapara
43	Ganesh	63	Villoni

44	Thankasaami	55	Villoni
45	Mani	65	Villoni
46	Saroja	65	Villoni
47	Lakshmi	58	Villoni
48	Rathna swami	49	Villoni
49	Manikaya Raj	45	Villoni
50	Sundhari	73	Udumbanpara
51	Jaanaki	60	Udumbanpara
52	V. Pal Raj	62	Udumbanpara
53	N. Pal Raj	68	Udumbanpara
54	Palanichammi	63	Udumbanpara
55	Santhammal	73	Udumbanpara
56	Rajedran	64	Udumbanpara
57	Kanjana	22	Udumbanpara
58	Maniyammaal	65	Kallarkkudi
59	Anparasu	45	Kallarkkudi
60	Raman	38	Cherunelli
61	Satheesh	34	Cherunelli
62	Chithra	28	Cherunelli
63	Aiswarya	22	Cherunelli
64	Vengitesh	44	Cherunelli
65	Shekaran	55	Kalluchadi
66	Santhosh	67	Kalluchadi
67	Gireesh	38	Kalluchadi
68	Suresh	62	Kalluchadi
69	Kamala	67	Kalluchadi
70	Muthulakshmi	72	Kalluchadi
71	Ganesh	34	Thalikkakallu
72	Aneesh	33	Thalikkakallu
73	Ramesh	29	Aanapantham
74	Anitha	26	Aanapantham
75	Mayilamani	66	Malakkappara
76	Soudhar Raj	48	Malakkappara
77	Nalini	37	Malakkappara
78	Nandhini	64	Malakkappara
79	Mani	36	Malakkappara
80	Balan	70	Malakkappara
81	Manonmani	56	Malakkappara
82	Anitha	55	Malakkappara
83	Vellachi	90	Malakkappara
84	Indrani	42	Malakkappara
85	Senthil Kumar	43	Malakkappara
86	Rama	35	Malakkappara
87	Ayyappan	37	Malakkappara
88	Geetha	42	Vazhachal
89	Girija	80	Vazhachal
90	Balankutti	65	Vazhachal

91	Kunjuvelu	95	Vazhachal
92	Thankappan	64	Vazhachal
93	Raman	63	Anakayam
94	Mayilammal	68	Anakayam
95	Chandran	62	Anakayam
96	Aassiamma	50	Anakayam
97	Kaliyamma	70	Sholayar
98	Abbas	56	Sholayar
99	Paaru	69	Sholayar
100	Chandrika	64	Sholayar
101	Karunakaran	50	Sholayar
102	Rajan	75	Vachumaram
103	Veerappan	60	Vachumaram
104	Narayanan	64	Thavalakuzhipara
105	Balan	58	Pokalapara
106	Pankajackshan	70	Pokalapara
107	Subhramanyan	56	Pokalapara

#### List of important informants of Malasar ethnic community

Sl. No.	Name of the infomant	Age	Name of the settlement
1	Murukan	44	Thannaasi
2	Chembakam	38	Thannaasi
3	Srikumari	52	Chunnambukalthodu
4	Veeramuthu	35	Polipaara
5	Santhosh	38	Kaliyampara
6	Anitha	33	Kaliyampara
7	Velayudhan	55	Kaliyampara
8	Manikandan	43	Kaliyampara
9	Mani	37	Kaliyampara
10	Karuppan	66	Kaliyampara
11	Thanka	70	Kaliyampara
12	Aiyyappan	40	4 cent colony
13	Krishnan	66	4 cent colony
14	Koundumani	58	Aattayaampathi kalam
15	Vellan	40	Ayyampathy
16	Narayanan	37	Kamaraj Nagar
17	Aanjaneyan	34	Kamaraj Nagar
18	Dasan	50	Kinarpallam
19	Suresh	29	Chettiyarkulam
20	Chinnamma	70	Chettiyarkulam
21	Lakshmi	55	Karadipara
22	Raghavan	62	Karadipara
23	Suma	30	Karadipara

24	Velayudhan	47	Naduchalla
25	Murali	38	Araam mile
26	Sneha	22	Araam mile
27	Sasi	34	Manivelan colony
28	Babu	31	Manivelan colony
29	Kanakam	62	Manivelan colony
30	Suresh babu	27	K.K. Pathy
31	Chandrika	19	K.K. Pathy
32	Shanmughan	37	Kuttypallam
33	Mani	39	Kuttypallam
34	Sheeja	35	Dam road Valayar
35	Vineetha	20	Dam road Valayar
36	Sivan	56	Ayyaswami Gounder Thottam
37	Kannan	43	Ayyaswami Gounder Thottam
38	Selvan	34	Saravana Gounder Thottam
39	Manoj	26	Pulapara
40	Sreelakshmi	18	Pulapara
41	Rajaselvam	32	Ellakkadu
42	Mahesh	28	Ellakkadu
43	Rukmini	22	Ellakkadu
44	Shailaja	44	Ellakkadu
45	Marimuthu	59	Ellakkadu
46	Rajedran	45	Ramanchalla
47	Arumughan	38	Ramanchalla
48	Kaliyamma	56	Ramanchalla
49	Masini	35	Jagatheesh Gounder Kaadu
50	Sheela	33	Koottukaranpathi
51	Revathi	28	Koottukaranpathi
52	Maheswari	29	Karipaali challa
53	Karuppuswami	66	Karipaali challa
54	Mariappan	56	Kudalukulambu
55	Massi	45	Kudalukulambu
56	Kalaichelvi	33	Kudalukulambu
57	Sunil	27	Chemmanampathy
58	Praveen	33	Chemmanampathy
59	Ravi	40	Pullukkad
60	Shivakami	23	Pullukkad
61	Anitha	33	Pullukkad
62	Sheena	30	Pullukkad
63	keerthi	19	Sungam
64	karthika	21	Sungam
65	keerthana	23	Sungam
66	Aathan	56	Sungam
67	Santha	45	Sungam
68	Sivakami	32	Sungam
69	Sunil	28	Sungam

<b>70</b>	Geetha	45	Sungam
<b>71</b>	Janaki	67	Sungam
<b>72</b>	Raman	49	Sungam
<b>73</b>	Ramesh	29	Sungam
<b>74</b>	Karnan	29	Sungam
<b>75</b>	Binu	18	Kachithodu
<b>76</b>	Kaliyappan	71	Kachithodu
<b>77</b>	Chembakam	65	Kachithodu
<b>78</b>	Kasthoori	20	Kachithodu
<b>79</b>	Krishnan	45	Kachithodu
<b>80</b>	Jayakumar	38	Kachithodu
<b>81</b>	Selva Kumar	22	Kachithodu
<b>82</b>	Manju	29	Kachithodu
<b>83</b>	Gouri	19	Kachithodu
<b>84</b>	Sarojini	27	Kachithodu
<b>85</b>	Kajana	24	Kachithodu
<b>86</b>	Fransis	20	Kachithodu
<b>87</b>	Velluthal	49	Kachithodu
<b>88</b>	Lissy Mol	23	Vettaikaranpudur
<b>89</b>	Vimala	43	Vettaikaranpudur
<b>90</b>	Sundhari	19	Vettaikaranpudur
<b>91</b>	Aneesh	26	Vettaikaranpudur
<b>92</b>	Shini	33	Vettaikaranpudur
<b>93</b>	Seetha	23	Vettaikaranpudur
<b>94</b>	Meri	39	Vettaikaranpudur
<b>95</b>	Meena	18	Vettaikaranpudur
<b>96</b>	Knakamanni	38	Vettaikaranpudur
<b>97</b>	Muthu	34	Kozhikamizhthi
<b>98</b>	Murukan	54	Kozhikamizhthi
<b>99</b>	Priyanka	26	Sarkarpathy
<b>100</b>	Meenakshi	33	Sarkarpathy

***Appendix IV***

Format of plagiarism check certificate

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2.	Title of thesis/dissertation	ETHNOECOLOGY OF KADAR AND MALASAR ETHNIC COMMUNITY ENDEMIC TO ANAMALAIS OF WESTERN GHATS		
3.	Name of the supervisor	Dr. K. H. AMITHA BACHAN		
4.	Department/Institution	BOTANY, MES ASMABI COLLEGE		
5.	Similar content (%) identified	Introduction/ Review of literature	Materials and Methods	Result/Discussion/ Summary/Conclusion
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6.	Software used	Original (Urkund)		
7.	Date of verification	28.4.2022		

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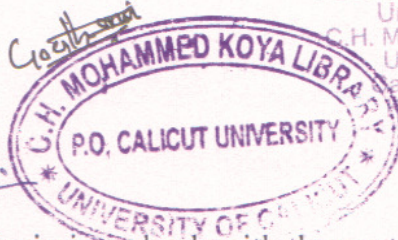
Dr. Amitha Bachan.K.H. 

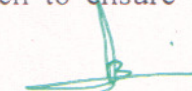
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