

## WILD FOOD TRADITIONALLY USED BY THE INDIGENOUS PEOPLE OF PARAMBIKULAM WILDLIFE SANCTUARY, WESTERN GHATS, KERALA, INDIA

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This paper attempts an ethnobiological investigation, performed during 2003 to 2006, to collect, identify and document information on wild food traditionally used by the indigenous people of the Parambikulam Wildlife Sanctuary in Palakkad district of Kerala, India. During the investigation 83 species of plants were found to be used by the tribes as vegetables, wild fruits, beverages and in other preparations. Vegetables formed the largest group which included roots, tubers, young leaves and buds, inflorescence, ripe/unripe fruits and seeds.

Among fauna, 34 species of mammals, 65 of fishes, 3 of reptiles, 5 of frogs and toads, 10 of birds and 5 of insects were recorded to be used as food by tribals of the Sanctuary. Besides meat, other products like honey, larvae of honey bees, eggs of crocodile and birds are also consumed by the tribals. A paste of Red Ants *Oecophylla smaragdina* is eaten as a condiment with curry. The tongue of *Varanus* and meat of fruit bat is used to treat chronic asthma. Many food plants in the wild are also used for medicinal purposes such as *Amorphophallus paeoniifolius* (Dennst.) Nicol., *Boerhavia chinensis* (L.) Rottb. and *Ensete superbum*, which serve both as food and medicine. There is much scope for improving the quality of food resources in the wild by using modern agronomic research, experimental, cytogenetical and molecular studies.

**Key words:** traditionally eaten, indigenous people, Parambikulam Wildlife Sanctuary, medicinal, wild food

### INTRODUCTION

Forests play an indispensable role in improving food security of indigenous people. Wild edible plants and animals are important in the livelihood strategies of forest dwellers/tribal populations. Leaves of wild species are among the most widely consumed. Besides leaves, they consume fruits, corms, shoots, seeds and young stem of plants.

Tribal groups are selective in their animal food. They eat a variety of food items, including meat of several animals like tongue of *Varanus*, liver of peacock, eggs of crocodile. The even-toed ungulates are the chief source of meat. Rodents are also important meat animals in various parts of India (Mathur 1954). According to Bodenheimer (1951), insects are highly nutritious and provide plenty of proteins, fats, vitamins, salts and minerals. In the past, the meat of wild animals was the primary source of nutrition. They hunted the animals for bare necessity, and to provide essential nutrients to their diet. The larger society has very little knowledge of the nutritive value of edible products of forests. So, documentation of wild food resources is important for the food security of future generation. The surveys on wild edible plants and animals in India have been conducted by many researchers. This is the first attempt to document the wild food resources of Parambikulam Wildlife Sanctuary and its surrounding areas.

### STUDY AREA

Parambikulam Wildlife Sanctuary is situated in Palghat district, Kerala state, India, with an extent of 274 sq. km between 10° 20'-10° 26' N and 76° 35'-76° 50' E. The Sanctuary is contiguous with the natural forests of Sholayar and Vazhachal in Thrissur district of the state. The boundary on the East is purely an administrative one with the forest clearance throughout the area bordered by Indira Gandhi Wildlife Sanctuary of Tamil Nadu. The Sanctuary is contiguous with forests of Anamalais, Nelliampathis, Sholayar high ranges and Palni hills. The major interception of the Western Ghats, namely the Palakkad gap, lies north of this area. The area in general has a slope towards west with the highest peak of Karimalagopuram (1,438 m) descending the banks of Chalakkudy river (439.5 m). The Sanctuary includes hilly terrains with undulated plateau. It spreads in the Sungam and Parambikulam valleys, which are well-known for teak plantation.

### MATERIAL AND METHODS

The study was conducted during 2003-2006. The aim of the study was to explore, collect, identify and preserve the wild and domesticated plants and animals used by the tribals

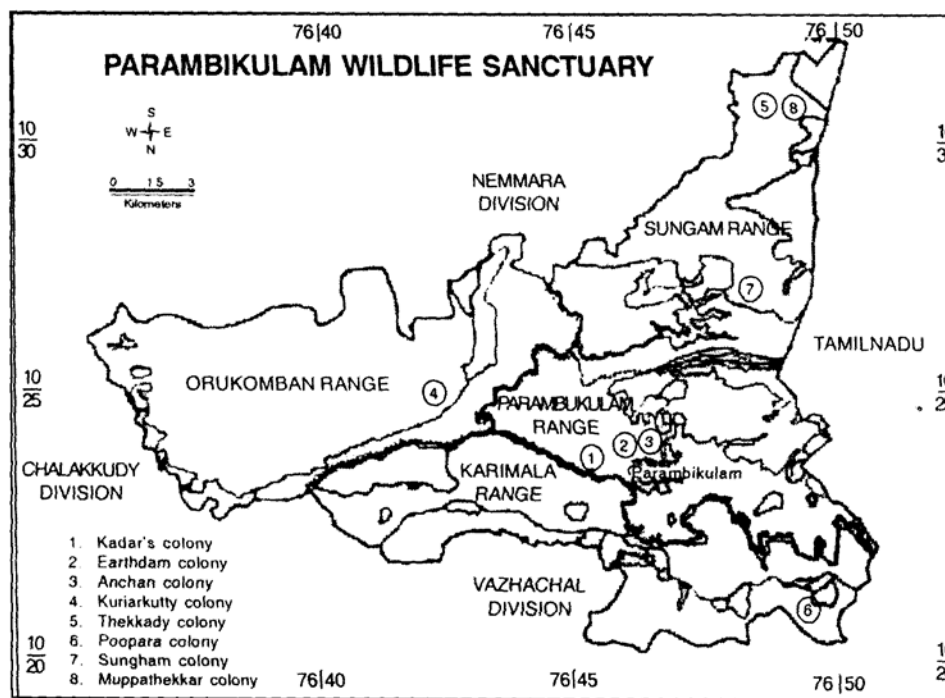


Fig. 1: Study area of the Parambikulam Wildlife Sanctuary

as food, fodder, medicine, oil, tannin, gum, small timber, fuel, fibres, furniture, tools, musical instruments, game animals, socio-religious purposes, and domestic purpose. The data were collected from the tribals through a questionnaire survey. The paper reports a part of the study (Fig. 1), i.e., wild food resources used by the tribals of the Sanctuary. The elders, tribal medicine men (*Vaidyas*), and hunters were contacted to collect data on wild food resources. Local names, parts used, method of utilization were gathered from them with regard to each plant and animal species. The specimens collected were identified with the help of floras and taxonomic revisions, important books on animals, monographs and other field keys (Hooker 1872-92; Gamble 1915-35; Vajravelu 1990; Sasidharan 2002). Identification was later confirmed by matching the specimens with the authentic specimens available at Herbarium and Wildlife Museum of Kerala Forest Research Institute. All the specimens collected were incorporated in the herbarium of the Kerala Forest Research Institute at Peechi.

## RESULTS AND DISCUSSION

During this study it was observed that the tribal communities of the Sanctuary fulfill deficiency in food needs by supplementing it with wild food plants and animals in their diet. The total agricultural produce of any tribal area is hardly enough for a few months to maintain their families. The tribals were well-acquainted with the food resources of

surrounding forests, and knew what to eat and how to separate harmful substances from the edible items. For e.g. Corms and petioles of wild *Colocasia* or *Amorphophallus* when eaten raw cause a terrible itching sensation in the throat. To remove the irritable properties, they are peeled, boiled in tamarind water and smeared with turmeric paste. This is one of the methods devised in the kitchens of tribals to make wild plants palatable.

Of the 83 species of edible plants collected, 30 are used as leafy vegetables, 31 for fruits, 16 for seeds, 10 in the form of rhizomes/tubers/corms and 6 as stems/shoots. *Amaranthus spinosus*, *Centella asiatica*, *Euphorbia hirta*, *Oxalis corniculata*, *Mollugo pentaphylla* are used by tribals more extensively. Among wild fruits, consumption of Jackfruit *Artocarpus heterophyllus* and Mango *Mangifera indica* is common. *Vigna vexillata* and *Ensete superbum* are noted for suppressing hunger. In Table 1, plant parts such as seeds, fruits, rhizomes, leaves and stem used as food are listed alphabetically with their scientific names, local names and life form. Number of species of each category of food use and growth habit is given.

With regard to wild food items, forest fauna is in no way less important than forest flora. They not only add to the aesthetic value and grandeur of the forest, but also play an important role in maintaining ecological balance and act as food security for the rural people. Meat obtained from the fauna and the fish collected from the forest brooks, streams and ponds form a fair adjunct to the diet of the people. In this

study, 65 species of fishes (Table 2), 34 of mammals, 10 of birds (Table 3), 3 of reptiles, 5 of frogs and toads (Table 4), and 5 of insects (Table 5) were recorded as food of Parambikulam Wildlife Sanctuary. Enumerated species and their products other than meat are also used as food (honey, larvae of honey bees, eggs of crocodile and birds). A paste made up of Red Ants (*Oecophylla smaragdina*) is eaten as a condiment with curry. Most of the observation claims that 'medicine is food and food is medicine'. The tongue of

Varanus and meat of fruit bat is used to treat chronic asthma. Soup of Watercock *Gallicrex cinerea* and *Canis aureus* is a remedy for general weakness, which emphasizes that tribals take a balanced diet. Many food plants in the wild are also used for medicinal purposes, e.g., *Amorphophallus paeoniifolius* (Dennst.) Nicol., *Boerhavia chinensis* (L.) Rottb. and *Ensete superbum*. Every dish has medicinal properties. Considering the above factors the documentation of wild food resources is of utmost necessity.

**Table 1:** Wild edible plants utilized by tribals of Parambikulam Wildlife Sanctuary

Sl. No.	Scientific Name	Local Name	Habit
1.	<i>Acacia nilotica</i> Delile	Karivelom	Tree
2.	<i>Acacia sinuata</i> (Lour.) Merr.	Cheevakay	Climbing shrub
3.	<i>Acalypha fruticosa</i> Forssk.	Kuppameni	Undershrub
4.	<i>Adenanthera pavonina</i> L.	Manchadi	Tree
5.	<i>Aegle marmelos</i> (L.) Corr.	Koovalam	Tree
6.	<i>Alangium salvifolium</i> (L.f.) Wang.	Ankolam	Climbing shrub
7.	<i>Ailanthus triphylla</i> (Dennst.) Alston	Mattipal, Perumaram	Tree
8.	<i>Allmania nodiflora</i> Wt.	Ponnamkannicheera	Herb
9.	<i>Alternanthera sessilis</i> (L.) R. Br.	Kozhuppacheera	Prostrate herb
10.	<i>Amaranthus spinosus</i> L.	Mullancheera	Undershrub
11.	<i>Amaranthus viridis</i> L.	Pachacheera	Glabrous herb
12.	<i>Amorphophallus paeoniifolius</i> var. <i>campanulatus</i> Dene.	Kattuchena	Herb
13.	<i>Anacardium occidentale</i> L.	Kashumav	Tree
14.	<i>Antidesma montanum</i> Blume	Puliyilamaram	Tree
15.	<i>Artocarpus heterophyllus</i> Lamk.	Pilavu	Tree
16.	<i>Artocarpus hirsutus</i> Lamk.	Ayini	Tree
17.	<i>Asparagus racemosus</i> Willd.	Shatavari	Straggling shrub
18.	<i>Bambusa bambos</i> (L.) Voss	Illi	Armed bamboo
19.	<i>Boerhavia chinensis</i> (L.) Rottb.	Thazhuthama	Diffused herb
20.	<i>Calamus rotang</i> L.	Cheruchooral	Climbing cane
21.	<i>Canthium angustifolium</i> Roxb.	Malankara	Stout shrub
22.	<i>Cardiospermum halicacabum</i> L.	Pokanamthooki	Climber
23.	<i>Caryota urens</i> L.	Anappana	Palm
24.	<i>Cassia tora</i> L.	Thakara	Shrub
25.	<i>Celosia nodiflora</i> L.	Kozhivalan	Undershrub
26.	<i>Centella asiatica</i> (L.) Urban	Kodangal	Herb
27.	<i>Cissus quadrangularis</i> Wall	Changalamparanada	Climber
28.	<i>Cleome longata</i> L.	Kattukaduku	Herb
29.	<i>Cleome monophylla</i> L.	Kattukaduku	Undershrub
30.	<i>Cleome viscosa</i> L.	Kattukaduku	Herb
31.	<i>Coccinia grandis</i> W. & A.	Kattukoval	Climber
32.	<i>Cochlospermum religiosum</i> (L.) Alston	Appakaduka	Tree
33.	<i>Colocasia esculenta</i> (L.) Schott	Kattuchembu	Tuberous herb
34.	<i>Commelina bengalensis</i> L.	Thavalapottan	Herb
35.	<i>Costus speciosus</i> (Koenig) J. E. Smith.	Channakoova	Herb
36.	<i>Curculigo orchoides</i> Gaertn.	Nilapana	Herb
37.	<i>Curcuma neilgherrensis</i> Wight	Manjakoova	Herb
38.	<i>Cycas circinalis</i> L.	Enthal	Palm
39.	<i>Dendrocalamus strictus</i> Nees.	Kallan mula	Tufted bamboo
40.	<i>Dioscorea bulbifera</i> L.	Kattukachils	Tuberous herb
41.	<i>Dioscorea hispida</i> L.	Chava kizhangu	Tuberous herb
42.	<i>Dioscorea pentaphylla</i> L.	Nuaran kizhangu	Tuberous herb
43.	<i>Diospyros longata</i> Gurke	Panachi	Tree
44.	<i>Elaeocarpus serratus</i> L.	Kara	Tree

**Table 1:** Wild edible plants utilized by tribals of Parambikulam Wildlife Sanctuary (*contd.*)

Sl. No.	Scientific Name	Local Name	Habit
45.	<i>Ensete superbum</i> (Roxb.) Cheesm.	Kalluvazha	Tall herb
46.	<i>Entada rheedei</i> Spreng.	Kakkumkai	Shrub
47.	<i>Euphorbia hirta</i> L.	Nilapala	Herb
48.	<i>Garcinia gummi-gutta</i> (L.) Robs.	Karukampuli	Tree
49.	<i>Gmelina arborea</i> Roxb.	Kumbil, Kumil	Tree
50.	<i>Grewia tiliaefolia</i> Vahl	Chadachi	Tree
51.	<i>Hibiscus surattensis</i> L.	Chemeenpuli	Shrub
52.	<i>Ixora brachiata</i> DC.	Malathechi	Shrub
53.	<i>Lantana camara</i> L.	Koothadichipoov	Shrub
54.	<i>Mangifera indica</i> L.	Mavu	Tree
55.	<i>Mesua ferrea</i> L.	Nanku	Tree
56.	<i>Mimusops elengi</i> L.	Elengi	Tree
57.	<i>Mollugo pentaphylla</i> L.	Kozhuppacheera	Herb
58.	<i>Olea dioica</i> Roxb.	Edana	Shrub
59.	<i>Oxalis corniculata</i> L.	Pulyarila	Herb
60.	<i>Passiflora foetida</i> L.	Kurukkan pazham	Climber
61.	<i>Phyllanthus emblica</i> L.	Nelli	Tree
62.	<i>Piper longum</i> L.	Thippali	Scandent shrub
63.	<i>Piper nigrum</i> L.	Kattukurumulaku	Glabrous climber
64.	<i>Portulaca oleracea</i> L.	Kolambucheera	Herb
65.	<i>Pouzolzia zeylanica</i> (L.) Bennet	Kuppacheera	Procumbent herb
66.	<i>Sarcostigma kleinii</i> Wt. & Arn.	Odalvalli	Straggling shrub
67.	<i>Schleichera oleosa</i> (Lour.) Oken	Poovam	Tree
68.	<i>Semecarpus anacardium</i> L.f.	Vellacheru	Tree
69.	<i>Sida cordata</i> (Burm. F.) Bross.	Vallikurunthotty	Prostrate herb
70.	<i>Smilax zeylanica</i> L.	Kareenlanchi	Climbing shrub
71.	<i>Solanum nigrum</i> L.	Kattukathrica	Shrub
72.	<i>Solanum torvum</i> Sw.	Sukitti cheera	Shrub
73.	<i>Solanum violaceum</i> Ortega	Chunda	Shrub
74.	<i>Sterculia guttata</i> DC.	Pottakavalam	Tree
75.	<i>Sterculia urens</i> Roxb.	Thondi	Tree
76.	<i>Saccharum spontaneum</i> L.	Kattu karimbu	Grass
77.	<i>Syzygium cumini</i> (L.) Skeels	Kattunjavai	Tree
78.	<i>Tamarindus indica</i> L.	Puli	Tree
79.	<i>Terminalia bellirica</i> Roxb.	Thanni	Tree
80.	<i>Vigna radiata</i> (L.) Wilczek var. <i>radiata</i>	Kattupayar	Trailing herb
81.	<i>Vigna trilobata</i> (L.) Verdc.	Kattupayar	Trailing herb
82.	<i>Vigna vexillata</i> (L.) A.Rich.	Kattupayar	Trailing herb
83.	<i>Ziziphus rugosa</i> Lamk.	Vanthodali	Climbing shrub

**Table 2:** Fishes consumed by tribals of Parambikulam Wildlife Sanctuary

Sl.No.	Scientific name	Local name	Sl.No.	Scientific name	Local name
1.	<i>Anguilla bengalensis</i> (Gray)	Mananjeen	11.	<i>Channa orientalis</i> (Bloch & Schneider)	Moyi/Varal/Thodan
2.	<i>Balitora brucei</i> Gray & Hard	Kalloty	12.	<i>Clarias dayi</i> Hora	Kadu
3.	<i>Barilius bakeri</i> (Day)	Kulamchadi	13.	<i>Clarias dussumieri</i> Valenciennes	Mushi
4.	<i>Barilius barna</i> (Hamilton-Buchanan)	Kulamchadi	14.	<i>Cyprinus carpio communis</i> L.	Katla/Velimeen
5.	<i>Barilius canarensis</i> (Jerdon)	Paral	15.	<i>Danio aequipinnatus</i> (McClelland)	Kannadi
6.	<i>Barilius gatensis</i> (Valenciennes)	Paral	16.	<i>Garra gotyla stenorrhynchus</i> (Jerdon)	Kallemkeri
7.	<i>Barilius kadamparaiensis</i>	Kulamchadi	17.	<i>Garra hughi</i> (Hughi)	Kallemkeri
8.	<i>Bhavana australis</i> (Jerdon)	Kalloty	18.	<i>Garra itamalaiyarensis</i>	Kalloty
9.	<i>Catla catla</i>	Catla	19.	<i>Garra maclellandi</i> (Jerdon)	Kalloty
10.	<i>Chanda nama</i> (Hamilton, 1822)	Kannadi	20.	<i>Garra mulya</i> (Sykes)	Kodali

**Table 2:** Fishes consumed by tribals of Parambikulam Wildlife Sanctuary (contd.)

Sl.No.	Scientific name	Local name	Sl.No.	Scientific name	Local name
21.	<i>Glossogobius giuris</i> (Hamilton)	Kalloty		(Hamilton-Buchanan)	
22.	<i>Glyptothorax housei</i> Herre	Kadu	43.	<i>Peristolepis marginata</i>	Kallanthilopia
23.	<i>Homaloptera montana</i> Herre	Kalloty	44.	<i>Pseudambassis ranga</i>	Kannadi
24.	<i>Hypselobarbus dubius</i> Day	Ponnukanda		(Hamilton-Buchanan)	
25.	<i>Hypselobarbus kolus</i> Sykes	Eanthel/Kuzhikuthan	45.	<i>Puntius amphibius</i> (Valenciennes)	Modon
26.	<i>Labeo calbasu</i>	Rohu	46.	<i>Puntius carnatus</i> (Jerdon)	Pachilavetti/Kadanna
	(Hamilton-Buchanan)		47.	<i>Puntius chola</i> (Hamilton-Buchanan)	Poovaliparal/Kadukka
27.	<i>Labeo rohita</i> (Hamilton-Buchanan)	Chembolli	48.	<i>Puntius fasciatus</i> (Jerdon)	Puilamkotta chomappu
28.	<i>Mastacembelus armatus</i>	Aral	49.	<i>Puntius filamentosus</i>	Punnukothi/Poovaliparal
	(Lacepede)			(Valenciennes)	
29.	<i>Mystus armatus</i> (Day)	Puzhukoori	50.	<i>Puntius jerdoni</i> (Day)	Kooral
30.	<i>Mystus cavasius</i>	Cheeku	51.	<i>Puntius melanampyx</i> (Day)	Puilamkotta karup
	(Hamilton-Buchanan)		52.	<i>Puntius poovarensis</i>	Kuvameen
31.	<i>Mystus montanus</i> (Jerdon)	Mullan	53.	<i>Rasbora labiosa</i>	Kanniyan
32.	<i>Nemacheilus denisoni denisoni</i>	Kalloty	54.	<i>Rasbora kannachiyarensis</i>	Kanniyanpennu
	(Day)		55.	<i>Salmo gairdnerii</i> (Richardson)	Chalaparal
33.	<i>Nemacheilus guentheri</i> (Day)	Kalloty	56.	<i>Salmo trutta fario</i> L.	Chalaparal
34.	<i>Nemacheilus monilis</i> Hora	Kalloty	57.	<i>Salmostoma boopis</i> (Day)	Chalaparal
35.	<i>Nemacheilus moreh</i> (Sykes)	Koima	58.	<i>Tor anamalaiensis</i>	Pachilavetti
36.	<i>Nemacheilus ruppelli</i> (Sykes)	Koima	59.	<i>Tor khudree</i> (Sykes)	Kuyil/Kutti
37.	<i>Neolissochilus</i>	Pachilavetti karuppu	60.	<i>Tor khudree malabaricus</i> Jerdon	Karimkuyil
	<i>anamalaiensis</i>		61.	<i>Tor putitora</i> (Hamilton-Buchanan)	Chemkuyil
38.	<i>Neolissochilus wynaadensis</i> (Day.)	Pachilavetti vella	62.	<i>Tor tor</i> (Hamilton-Buchanan)	Karimkuyil
39.	<i>Ompok bimaculatus</i> Bloch	Kannadi	63.	<i>Travancoria elongata</i>	Kalloty
40.	<i>Ompok malabaricus</i> Valenciennes	Kari		(Pethiyagoda & Kottelat)	
41.	<i>Oreochromis mossambica</i> Peters	Thiloppia	64.	<i>Travancoria jonesi</i> Hora	Kalloty
42.	<i>Parluciosoma daniconius</i>	Kanniyan	65.	<i>Xenentodon cancila</i> (Hamilton)	Kolan

**Table 3:** Birds and mammals consumed by tribals of Parambikulam Wildlife Sanctuary

Sl.No.	Scientific name	Local name	Sl.No.	Scientific name	Local name
1.	<i>Anthracosceros coronatus</i>	Malamuzhakki vezhambal	19.	<i>Gallicrex cinerea</i> (Gmelin, 1789)	Kulakozhi
	(Boddaert, 1783)		20.	<i>Hystrix indica</i> (Kerr, 1792)	Mullen panni
2.	<i>Athene brama</i> (Temminck, 1821)	Pullimoonga	21.	<i>Lepus nigricollis</i> (F. Cuvier, 1823)	Muyal
3.	<i>Axis axis</i> (Erleben, 1977)	Pulliman	22.	<i>Loris tardigradus</i> (Linnaeus, 1758)	Kuttihevangu
4.	<i>Bandicota bengalensis</i>	Peruchazhi	23.	<i>Lutra lutra</i> (Linnaeus, 1758)	Neemai
	(Grey & Hardwicke, 1833)		24.	<i>Macaca silenus</i> (Linnaeus, 1758)	Simhavalan kurangu
5.	<i>Bos frontalis</i> (Lambert)	Kattupoth	25.	<i>Macaca radiata</i> (e. Geoffroy, 1812)	Vella kurangu
6.	<i>Bubo nepalensis</i> (Hodgson, 1836)	Moonga	26.	<i>Manis crassicaudata</i> (Gray, 1827)	Urumbutheeni
7.	<i>Bubulcus ibis</i> (Linnaeus, 1758)	Vellakokku	27.	<i>Megaderma lyra</i> (Geoffroy, 1810)	Kadavathil
8.	<i>Canis aureus</i> (Linnaeus, 1758)	Kurunari	28.	<i>Melursus ursinus</i> (Shaw, 1791)	Then karadi
9.	<i>Cervus unicolor</i> (Kerr, 1792)	Kalaman/Mlavu	29.	<i>Muntiacus muntjack</i>	Kezhaman
10.	<i>Columba livia</i> (Gmelin, 1789)	Pravu		(Zimmerman, 1780)	
11.	<i>Corvus macrohynchos</i>	Kattukakka	30.	<i>Mus booduga</i> (Gray, 1837)	Kattuchundeli
	(Wagler, 1827)		31.	<i>Mus musculus</i> (Linnaeus, 1758)	Chundeli
12.	<i>Corvus splendens</i> (Vieillot, 1817)	Kakka	32.	<i>Pavo cristatus</i> (Linnaeus, 1758)	Mayil
13.	<i>Cuon alpinus</i> (Pallas, 1811)	Kattupatti	33.	<i>Petaurista petaurista</i>	Malambaran
14.	<i>Cynopterus brachyotis</i>	Vawal		(Pallas, 1766)	
	(Muller, 1838)		34.	<i>Porphyrio porphyrio</i>	Neelakozhi
15.	<i>Cynopterus sphinx</i> (Vahl, 1797)	Kurumookan	35.	<i>Trachypithecus johnii</i>	Karinkurangu
16.	<i>Egretta garzetta</i> (Linnaeus, 1766)	Kokku		(Fischer, 1829)	
17.	<i>Funambulus layardi</i> (Blyth, 1849)	Varayannan	36.	<i>Pteropus giganteus</i>	Parakkum kurukkan
18.	<i>Funambulus tristriatus</i>	Kattuvarayannan		(Brunnich, 1782)	
	(Waterhouse, 1837)		37.	<i>Rattus blanfordi</i> (Thomas 1881)	Katteli

**Table 3:** Birds and mammals consumed by tribals of Parambikulam Wildlife Sanctuary

Sl.No.	Scientific name	Local name	Sl.No.	Scientific name	Local name
38.	<i>Rattus rattus</i> (Linnaeus, 1758)	Eli	42.	<i>Sus scrofa</i> (Linnaeus, 1758)	Kattupanni
39.	<i>Ratufa indica</i> (Schreber, 1777)	Malayannan	43.	<i>Moschiola meminna</i> (Erleben, 1777)	Kooranpanni
40.	<i>Rousettus leschenaultii</i> (Desmarest, 1820)	Thavidan pazhavawal	44.	<i>Vulpes bengalensis</i> (Shaw, 1800)	Kurukkan
41.	<i>Semnopithecus entellus</i> (Dufresne, 1797)	Hanuman kurangu			

**Table 4:** Reptiles and amphibians consumed by tribals of Parambikulam Wildlife Sanctuary

Sl. No.	Scientific name	Local name
1.	<i>Varanus bengalensis</i> (Daudin, 1802)	Udombu
2.	<i>Euphlyctis hexadactyla</i> (Lesson, 1834)	Vazhathavala
3.	<i>Euphlyctis cyanophlyctis</i> (Schneider, 1799)	Thavala
4.	<i>Limnonectes limnocharis</i>	Pullithavala
5.	<i>Hoplobatrachus crassus</i> (Jerdon)	Thavala
6.	<i>Hoplobatrachus tigerinus</i>	Pockachithavala
7.	<i>Ptyas mucosus</i> (Linnaeus, 1758)	Cheera
8.	<i>Crocodylus palustris</i> (Lesson, 1831)	Cheenkan

Thorough ethnobiological exploration of various tribal areas may reveal that many more plants and animals prove to be a cure for thirst or hunger depression problems in humans. There is much scope for improving the growth forms of wild food resources by using modern agronomic research, experimental cytogenetic studies. For all such endeavour,

**Table 5:** Insect food resources of Parambikulam Wildlife Sanctuary

Sl.No.	Scientific name	Local name
1.	<i>Apis cerana indica</i> (Fabricius, 1793)	Cheruthenicha
2.	<i>Apis dorsata</i> (Fabricius, 1793)	Kattuthenicha
3.	<i>Apis florae</i> (Fabricius, 1787)	Kolthenicha
4.	<i>Oecophylla smaragdina</i> (Fabricius, 1775)	Chonnurumbu
5.	<i>Patanga succinata</i> (Johansson, 1763)	Pulchadi

thorough field work in various tribal areas and critical ethnobiological observation on wild edible plants and animals are the basic requirements.

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