

ETHNOBOTANICAL STUDIES ON WILD EDIBLE PLANTS USED BY MALAYALI TRIBALS OF MELUR, BODHA HILLS, SOUTHERN EASTERN GHATS, NAMAKKAL DISTRICT, TAMIL NADU, INDIA

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ABSTRACT

A survey of wild edible and food plants was undertaken and identified various species used by the malayali tribes of Melur, Bodha hills, located in the Rasipuram taluk, Namakkal District, Southern Eastern Ghats of Tamil Nadu, India. The purpose of the study was to document the traditional wild edible plants used by malayali tribals. Tribals mostly depend on wild plants and such natural products for their food such as vegetables of leafy varieties, unripe fruits and ripen fruits. The local tribe community depends for their dietary requirements since a long time using these plants. The study identified 95 wild edible plant species under 75 genera and 48 family. Out of 95 wild edible plant species, Leafy vegetables (43- species), wild fruit (38 species) eaten as a raw, some wild unripe fruit as vegetables and are consumed by this tribal people in this study area have been identified and documented.

These leafy vegetables, unripe fruits, and tubers are collected in different seasons, cooked and eaten along with boiled rice or millets. These wild edible plants are have enriched with high nutrition and free from artificial chemicals.

KEY WORDS: Wild edible plants, Malayali tribe, Melur, Bodha hills, Southern Eastern Ghats, Tamil Nadu.

INTRODUCTION

Wild edible plants have played an important role in human life since time immemorial. Throughout the history, wild edible plants have sustained human populations in each of the inhabited continents. In India, most rural inhabitants depend on the wild plants to meet their supplementary food requirements. The diversity in wild plant species offers variety in family diet and contributes to household food security. Today, most human plant food is based on rather limited number of crops, but it is clear that in many parts of the world the use of wild plants is not negligible. Sometimes the nutritional value of wild plants is higher than several known common vegetables and fruits^[1].

There are at least 3000 edible plant species known to mankind but just about 30 crops alone contribute to more than 90% of the world's calorie intake and only 120 crops are economically important at the national scale. This shows that several hundreds of plants are still discarded or unidentified at the hands of various human societies. Millions of people in many developing countries do not enough food to meet their daily requirement and a lack of one or more nutrients. Among the various kinds of plants, food plants received the earliest attention of mankind and reflect, man's search for knowing more and more about the nutrient qualities of food plants. Wild food also contributes to the house-hold income security of millions of forest depend communities. It plays a major role in meeting the nutritional requirement of the tribal population in remote parts of the country throughout the year. Various tribal sections of India are repositories of rich knowledge on various uses of plant genetic resources^[2]. Wild edible plants are major source of food for tribal inhabitants in forests. Edible parts of wild plants (fruit, flowers, rhizome, leaves, tubers, inflorescence, roots, tubers, etc.) are the nature's gift to mankind; these are not only delicious and refreshing but also the chief source of vitamins, minerals and proteins^[3]. About 1,000 species of these plants provide sustenance to tribal inhabitants in India^[4].

Wild edible fruits play a significant role in rural areas by providing nutrient supplementary diet and generating side income to the poor people. Wild fruits can be considered as rich sources of various vitamins, minerals, fibers and polyphenols which provide health benefits. Consumption of wild fruits reduces the risk of several diseases like diabetes, cancer, coronary heart disease, neurodegenerative ailment. A scientific investigation of wild edible fruits is urgently needed to assess the potentiality which would be cultivated and utilized as a source of food material for an ever increasing population^[5].

The present study help us to documents the wild relative of the plants. It provides information about valuable plants on which the tribal community depends. It also provides crop improvement due to their rich nutrient value. It also provides information about nutrient rich diet for Malayali tribal communities in melur, Bodha hills.

Study Area

The present study has been undertaken at Melur of Bodha hills. Bodha hills is a 1200 metres mountain (Latitude: 11.916667; Longitude: 77.55), in Southern Eastern Ghats, Rasipuram taluk, Namakkal District of Tamil Nadu. Bodha hills situated towards the south east of Salem. Rasipuram is the nearest town of the Bodha hills. Thengalpalayam, vadugam and kullampatti are the villages nearer to the Bodha hills. The Village Melur is the highest peak of Bodha Hills.

Bodha hills consist of an environment of dry deciduous type of forest. The area has a predominant red soil impregnated with organic matter, and granite, bed rock is overlaid with shallow, sandy loam, and glacial soils are moderate to well drained. Temperature begins increasing after March. April is warmest month with an average temperature of 33.20 °C at noon. January is coldest with an average temperature of 15.10 °C at night. Temperatures drop sharply at night. February is on average the month with most sunshine. The main source of water for drinking and irrigation is the well water. It tastes sweet and provided with ample amount of minerals. The wells are filled by the seasonal rains. The hill gets rainfall during the October and November by the North- East monsoon, this is a succession of cyclonic storms in the Bay of Bengal proceeding towards the land and the bulk of the rain is received from the south west monsoon also. The summer shower at times and accounts for about 6% of the annual rainfall.

Bodha Hills

Bodhi malai- Mountain of Enlightenment,” a lofty (4,015)’ or 1182 meters range. It derives its name form word bodhi (enlightenment, illumination, or awakening) of the religion of Buddhism. The Buddhist connection is father emphasized by Anandha malai (Bliss Mountain) the name for one of its peaks, In the thirteen century, it was known as Karungali malai (Red Wood Mountain). Located at the geographical centre of the district, the mountain extends east- west for twelve miles and is separated from the kollimalai by the Hanuman Ghat. The mountain includes the peaks of Anandha (or Periya) malai (947 meters), Jambuttu malai (3,216’) and kuttamalai (3,700’). The forests at the eastern end are now abundant with

sandal wood trees. The peak near melur contains a number of Pandukal monuments, on the mountain are the Malayali tribal hamlets of kizhur, kutta malai, melur (3,861'), and Nadu valavu.

The Juxtaposition of the Bodhi malai Dharmapuri leads one to conjecture that Salem might have harboured the Buddhist Mahayana Philosopher, Bodhidharma (450-535). According to Chinese tradition, he went to China from South India (Salem) in 480 at the invitation of the Chinese emperor^[6]. Buddhists make a claim to this hill calling it Bodhi malai which was later corrupted as Bodha malai.

Melur

Upper Town." a village (3,861') on the Bodha malai mountain. It is inhabited by a small group of malayalis related to the kolli malayalis, more than twenty pandukal tombs (Ancient stone. Pandukals are monuments built of large slabs or blocks to have been built by the earliest inhabitants of South India. They are believe, remains of cult of ancestral worship, a form of pre. Brahminical Hindu religion that prevailed here. Through the worship or honoring the dead, the generations were bound together in a stabilizing continuity so that the living formed a holy union and sequence of blood and flesh stretching far into the past and the future. The ancestral worship held the dead, the living, and the unborn together in a sacked unity) and are found on the nearby peak among a grove of sandal wood trees, most of them have been disturbed and the interior dolmens exposed. The malayalis believe that they are remnants of forts and palaces of an extinct race of "Pandiya Raja", and that they, like the Irish leprechauns, were very small in size, used mushrooms for umbrellas and employed rabbits for ploughing and riding. A heap of Neolithic stone tools, collected from the fields and banks of a stream, is worshipped by the residents as Pillaiyar^[6].

Malayali tribal's of Bodha hills

Malayali (Tamil) "Mountain men" The malayalis of these Bodha malai appear to have migrated during the period between eleventh and thirteenth centuries from the kolli malai. They cultivate the small plateaus and slopes of the mountain and sell their produce by head loads in the weakly markets of the towns in the surrounding plains. Access to and from these hamlets is only by steep and arduous footpaths. They are found in the hamlets of Kutta malai, Kizhur, Kurinjyur, Melur, Sambutthu, and Naduvalavu. They are grouped into several kulas including Kasakali, Kocha maniyan, Masiyan, and sirakali. "Sirakali" is the name of a form of mother Kali. It is interesting to notice that a Goddess named Sara Kali (Queen Kali) was

worshiped by European Gypsies who are said to have originated from India. They called Sara kali as “their mother, the woman, the sister, the queen. The Bodhi Malayalis worship many minor deities such as Andi Appan, bodhi malai siddhan, Periya Sadaiyan, Periyasamy and Saelai katti karuppu. They also offer prayers at the siddhar kovil, now a Vishnu temple, situated at the highest point of the mountain near Melur. The melur Pillayar temple contains no statue of the elephant-faced God, but a pile of an iconic Neolithic stone tool collected from various places of the mountain ^[6].

MATERIAL AND METHODS

Intensive and extensive ethnobotanical study were conducted throughout the Bodha hills at regular intervals from 2011-2012. This has resulted in the information about all wild plant species and materials of Bodha Hills. During the field visits, the usage of wild edible plants was gathered from the local herbal medical practitioners and elderly people of the tribes Malayalis, who have a very long acquaintance with the usage of plants. The plant specimens were collected in their flowering and fruiting stage for voucher specimens based on the standard instructions. All the plant specimens collected during the survey were identified with help of floras ^[7& 8].

RESULT AND DISCUSSION

The present study focused mainly wild edible plants used by the Malayali tribal peoples for their food. 95 wild edible plant species were documented in Melur of Bodha hills. Out of 95 species, 93 plant species comes under Angiosperms, 2 species comes under Pteridophyte. Out of 93 angiosperm plant species belongs to 73 genera and 46 families. Out of 93 angiosperm species, 86 species comes under Dicotyledones, 7 species comes under monocotyledons. Out of 86 dicotyledons plant species, 40 species belongs to polypetalae, 21 species belongs to gamopetalae, and 25 species belongs to monochlamydeae. Out of 46 angiosperms families identified the widely utilized species belonged to Amaranthaceae (10- species) followed by Rutaceae, Asclepiadaceae and Moraceae (5- species), Euphorbiaceae, Rubiaceae and Solanaceae (4- species), Cucurbitaceae, Tiliaceae and Rhamnaceae (3- species), Nyctaginaceae, Arecaceae, Capparaceae, Apocynaceae, Menispermaceae, Dioscoreaceae and Combretaceae (2- species) and rest of the families were represented by each species. Plant species are habit was documented, out of 95 plant species, tree (30- species), herb (29- species), shrub (16- species), straggler (10- species), vine (7- species), fern (2- species) and twinner (1- species). Out of 95 wild edible plant species, Leafy vegetables (43- species), wild

fruit (38 species) eaten as a raw, some wild unripe fruit as vegetables and are consumed by this tribal people in this study area have been identified and documented (Table-1). These leafy vegetables, unripe fruits, and tubers are collected in different seasons, cooked and eaten along with boiled rice or millets. These wild edible plants are have enriched with high nutrition and free from artificial chemicals.

Regular consumption of fruits like *Alangium salvifolium*, *Berberis tinctoria*, *Coccinia grandis*, *Elaeocarpus tuberculatus*, *Embelia ribes*, *Euphorbia hirta*, *Ficus racemosa*, *Mahonia leschenaultia*, *Maesa indica*, *Moringa oleifera*, *Opuntia dillenii*, *Passiflora edulis*, *Phyllanthus emblica*, *Phyllanthus indofischeri*, *Pichecellobium dulce*, *Rubus ellipticus* and *Syzygium cumini* were observed from the tribes. Regular consumption of fruit is associated with reduced risks of cancer, cardiovascular diseases (especially coronary heart disease), stroke, Alzheimer disease, cataracts and some of the functional diseases associated with aging [9]. Wild fruits inexpensive, locally available and rich in nutritive value and have a great socio- economic significance because of their food and medicinal values. Mass attention is needed to protect and popularize the wild fruits among the people and further research is needed for analysis of nutritional and medicinal value [10].

In the rural country side of many third world nations, wild fruits are often the only fruits consumed as people cannot afford cultivated commercial fruits such as apple, grape, pomegranate or orange. In India, the indigenous fruits collected from wild play significant role in the food and nutritional security of rural poor and tribes. Some wild fruits have been identified to have better nutritional value than cultivated fruits [11 & 12]. As a result, in recent years, a growing interest has emerged to evaluate various wild edible plants for their nutritional features [13 & 14]. A comparative nutritional status of most popular and commonly consumed fruits [15 & 16] with wild edible fruits revealed that most of the wild fruits qualify as high nutrient and mineral content comparable to popular cultivated counter parts such as Banana, Mango, Pomegranate, Sapota, Guava etc [17 & 18].

These products are collected from both wild and cultivated plants. The malayali tribal peoples cultivated these edible plants in their home garden and collected from wild plants. These indigenous plant species must be taken into consideration and treated with equal importance as like medicinal plants. Many research work must be carried out in these plant species to increases their productivity and which help to increase our countries economy and food security [19, 20 & 21].

Table-1: Edible plants and their produce consumed by malayali tribals of Melur, Bodha hills.

S. No.	Botanical name	Family	Vernacular name	Habit	Form of use/Recipe
1	<i>Acalypha fruticosa</i> Forsskal	Euphorbiaceae	Sinni	Shrub	Leaves are used as a vegetable
2	<i>Achyranthes aspera</i> L.	Amaranthaceae	Nayuruvi	Herb	Leaves are used as a vegetable
3	<i>Achyranthes bidentata</i> Blume	Amaranthaceae	Sen nayuruvi	Herb	Leaves are used as a vegetable
4	<i>Aegle marmelos</i> (L.) Corr. Serr.	Rutaceae	Vilvam	Tree	Fruits are eaten as raw
5	<i>Alangium salvifolium</i> Linn.	Alangiaceae	Alanji	Tree	Fruits are eaten as raw
6	<i>Allmania nudiflora</i> (L.) R. Br. ex Wight A. <i>longepedunculata</i> (Trimen) Gamble	Amaranthaceae	Kumati keerai	Herb	Leaves are used as a vegetable
7	<i>Alternanthera pungens</i> Kunth	Amaranthaceae	Thevidiamullu	Herb	Leaves are used as a vegetable
8	<i>Alternanthera sessilis</i> (L.) R. Br. ex DC. <i>Alternanthera triandra</i> Lam.	Amaranthaceae	Ponnankanni keerai	Herb	Leaves are used as a vegetable
9	<i>Amaranthus spinosus</i> L.	Amaranthaceae	Mullukeerai	Herb	Leaves are used as a vegetable
10	<i>Amaranthus tricolor</i> L. <i>Amaranthus gangeticus</i> L.	Amaranthaceae	Thandu keerai	Herb	Leaves are used as a vegetable
11	<i>Amaranthus viridis</i> L.	Amaranthaceae	Kuppai keerai	Herb	Leaves are used as a vegetable
12	<i>Anacardium occidentale</i> L.	Anacardiaceae	Mundhiri	Tree	Fruits are eaten as raw
13	<i>Ananas comosus</i> (L.) Merr. <i>Ananas sativus</i> Schultes f.	Bromeliaceae	Annasipalam	Herb	Fruits are eaten as raw
14	<i>Annona squamosa</i> L.	Annonaceae	Seetha	Tree	Fruits are eaten as raw
15	<i>Artocarpus heterophyllus</i> Lam.	Moraceae	Pala	Tree	Fruits are eaten as raw
16	<i>Atalantia monophylla</i> (L.) Corr. Serr.	Rutaceae	Kaattu elumitchai	Tree	Fruits are eaten as raw
17	<i>Basella alba</i> L.	Basellaceae	Pasalai keerai	Twiner	Leaves are used as a vegetable
18	<i>Boerhavia diffusa</i> L.	Nyctaginaceae	Mukkurattai	Herb	Leaves are used as a vegetable
19	<i>Boerhavia erecta</i> L.	Nyctaginaceae	Naer mukkurattai	Herb	Leaves are used as a vegetable
20	<i>Borassus flabellifer</i> L.	Arecaceae	Panai	Tree	Fruits are eaten as raw
21	<i>Canavalia mollis</i> Wallich ex Wight & Arn. <i>Canavalia ensiformis</i> DC. Var mollis (Wight & Arun.)Baker	Fabaceae	Malai thambattai	Straggler	Fruits are used as a vegetable
22	<i>Canthium coromandelicum</i> (Burm.f.)Alston <i>Canthium parviflorum</i> Lam.	Rubiaceae	Kaarai maram	Tree	Fruits are eaten as raw

23	<i>Capparis divaricata</i> Lam. <i>Capparis stylosa</i> DC.	Capparaceae	Thorati maram	Tree	Fruits are eaten as raw
24	<i>Capparis zeylanica</i> L.	Capparaceae	Aathandai	Straggler	Leaves are used as a vegetable
25	<i>Caralluma attenuata</i> Wight	Asclepiadaceae	Kallumuliyan	Herb	Aerial parts used for make a curry
26	<i>Cardiospermum halicacabum</i> L.	Sapindaceae	Mudakathan	Vine	Leaves are used as a vegetable
27	<i>Carissa carandas</i> L.	Apocynaceae	Kalakai	Shrub	Fruits are eaten as raw
28	<i>Carissa spinarum</i> L.	Apocynaceae	Sirukila	Shrub	Fruits are eaten as raw
29	<i>Cassia angustifolia</i> Vahl	Caesalpinaceae	Nilavarai	Shrub	Leaves are used as a vegetable
30	<i>Cassia auriculata</i> L.	Caesalpinaceae	Aavarai	Shrub	Leaves are used as a vegetable
31	<i>Cassia tora</i> L.	Caesalpinaceae	Thakara	Herb	Leaves are used as a vegetable
32	<i>Celosia argentea</i> L.	Amaranthaceae	Pannaikeerai	Herb	Leaves are used as a vegetable
33	<i>Centella asiatica</i> (L.) Urban	Apiaceae	Vallarai	Herb	Leaves are used as a vegetable
34	<i>Cissus quadrangularis</i> L.	Vitaceae	Pirandai	Shrub	Inter node and leaves are used as a vegetable
35	<i>Citrulus colocynthis</i> (L.) Schrader	Cucurbitaceae	Kurumithankai	Vine	Fruits are eaten as raw and fruits are used as a vegetable
36	<i>Clausena dentata</i> (Willd.) Roemer <i>Clausena willdenowii</i> Wight & Arn.	Rutaceae	Nuna sedi	Shrub	Fruits are eaten as raw
37	<i>Coccinia grandis</i> (L.) J. Voigt <i>Coccinia indica</i> Wight & Arn.	Cucurbitaceae	Kovai	Vine	Fruits are eaten as raw
38	<i>Cocculus hirsutus</i> (L.) Diels	Menispermaceae	Kattukodi	Straggler	Leaves are used as a vegetable
39	<i>Commelina benghalensis</i> L.	Commelinaceae	Kannan kolai	Herb	Leaves are used as a vegetable
40	<i>Corchorus capsularis</i> L.	Tiliaceae	Preeti keerai	Herb	Leaves are used as a vegetable
41	<i>Curculigo orchioides</i> Gaertner	Hypoxidaceae	Nilappanai	Herb	Rhizomes are used for make a curry
42	<i>Decalepis hamiltonii</i> Wight & Arn.	Asclepiadaceae	Maavilankilangu	Straggler	Rhizomes are used for make a curry
43	<i>Digera muricata</i> (L.) C. Martius <i>Digera arvensis</i> Forsskal	Amaranthaceae	Thoyakeerai	Herb	Leaves are used as a vegetable
44	<i>Dioscorea oppositifolia</i> L.	Dioscoreaceae	Saani kilangu	Vine	Tubers are used for make a curry
45	<i>Dioscorea pentaphylla</i> L.	Dioscoreaceae	Irulayankilangu	Vine	Tubers are used for make a curry
46	<i>Drynaria quercifolia</i> (L.) J. Smith.	Polypodiaceae/ Pteridophyta	Aattukaal kilangu	Fern	Rhizomes are used as make a pickle.

47	<i>Eclipta prostrata</i> (L.) L. <i>Eclipta alba</i> (L.) Hassk.	Asteraceae	Karisalankanni	Herb	Leaves are used as a vegetable
48	<i>Erythroxylum monogynum</i> Roxb.	Erythroxylaceae	Sempulichan	Shrub	Fruits are eaten as raw
49	<i>Euphorbia hirta</i> L.	Euphorbiaceae	Ammanpatcharisi	Herb	Leaves are used as a vegetable
50	<i>Ficus benghalensis</i> L.	Moraceae	Aalamaram	Tree	Fruits are eaten as raw
51	<i>Ficus microcarpa</i> L.f. <i>Ficus retusa auct.</i> Non L.	Moraceae	Kalitchi	Tree	Fruits are eaten as raw
52	<i>Ficus racemosa</i> L. <i>Ficus glomerata</i> Roxb.	Moraceae	Atthi	Tree	Fruits are eaten as raw
53	<i>Ficus religiosa</i> L.	Moraceae	Arasamaram	Tree	Fruits are eaten as raw
54	<i>Ficus virens</i> Aiton <i>Ficus infectoria</i> Roxb.	Moraceae	Itchimaram	Tree	Fruits are eaten as raw
55	<i>Flacourtia indica</i> (Burm. f.) Merr. <i>Flacourtia sepiaria</i> Roxb.	Flacourtiaceae	Sothukala	Shrub	Fruits are eaten as raw
56	<i>Gardenia gummifera</i> L.f.	Rubiaceae	Karadivetchi	Tree	Fruits are eaten as raw
57	<i>Grewia hirsuta</i> Vahl	Tiliaceae	Poonai pudukan maram	Shrub	Fruits are used as a vegetable
58	<i>Grewia tiliifolia</i> Vahl	Tiliaceae	Sadachi	Tree	Fruits are used as a vegetable
59	<i>Gymnema sylvestre</i> (Retz.) R. Br. Ex Roemer & Schultes	Asclepiadaceae	Sirukurinjan	Straggler	Leaves are used as a vegetable
60	<i>Hemidesmus indicus</i> (L.) R. Br.	Asclepiadaceae	Nannari	Straggler	Leaves are used as a vegetable
61	<i>Justicia tranquebariensis</i> L.f.	Acanthaceae	Punnakku poondu	Herb	Leaves are used as a vegetable
62	<i>Limonia acidissima</i> L. <i>Feronia elephantum</i> Corr. Serr.	Rutaceae	Vilamaram	Tree	Fruits are eaten as raw
63	<i>Mangifera indica</i> L.	Anacardiaceae	Maa	Tree	Fruits are eaten as raw
64	<i>Marsilea quadrifolia</i> L.	Marsileaceae	Aarai	Fern	Leaves are used as a vegetable
65	<i>Morinda coreia</i> Buch-Ham. <i>Morinda tinctoria</i> Roxb.	Rubiaceae	Nuna	Tree	Fruits are eaten as raw
66	<i>Moringa concanensis</i> Nimmo ex Dalz. & Gibson	Moringaceae	Kaattu murungai	Tree	Leaves and Fruits are used as a vegetable
67	<i>Mukia maderaspatana</i> (L.) M. Roemer <i>Melothria maderaspatana</i> (L.) Cogn.	Cucurbitaceae	Musumosukai	Vine	Leaves are used as a vegetable
68	<i>Opuntia stricta</i> (Haw.) var. <i>dillenii</i> (Ker Gawler) L. Benson <i>Opuntia dillenii</i> (Ker Gawler) Haw.	Cactaceae	Chappathikalli	Shrub	Fruits are eaten as raw
69	<i>Oxalis corniculata</i> L.	Oxalidaceae	Puliyarai	Diffuse herb	Leaves are used as a vegetable
70	<i>Phoenix loureirii</i> Kunth <i>Phoenix humilis</i> Royle var.	Arecaceae	Eachai maram		Fruits are eaten as raw
71	<i>Phyllanthus emblica</i> L. <i>Emblica officinalis</i> Gaertner	Euphorbiaceae	Periyaneli	Tree	Fruits are eaten as raw

72	<i>Phyllanthus reticulatus</i> Poiret <i>Kirganelia reticulata</i> (Poiret) Baillon	Euphorbiaceae	Poolan	Shrub	Fruits are eaten as raw
73	<i>Physalis minima</i> L.	Solanaceae	Sodakkuthakkali	Herb	Fruits are used as a vegetable
74	<i>Piper nigrum</i> L.	Piperaceae	Milagu	Vine	Fruits are used as a vegetable
75	<i>Pithecellobium dulce</i> (Roxb.) Benth.	Mimosaceae	Konapuli	Tree	Fruits are eaten as raw
76	<i>Portulaca oleracea</i> L.	Portulacaceae	Paruppu keerai	Herb	Leaves are used as a vegetable
77	<i>Premna tomentosa</i> Willd.	Verbenaceae	Minnamaram	Tree	Leaves are used as a vegetable
78	<i>Psidium guajava</i> L.	Myrtaceae	Koyyamaram	Tree	Fruits are eaten as raw
79	<i>Pterolobium hexapetalum</i> (Roth) Santapau & Wagh <i>Pterolobium indicum</i> A. Rich.	Caesalpinaceae	Karu indu	Straggler	Fruits are eaten as raw
80	<i>Scutia myrtina</i> (Burm. f.) Kurz	Rhamnaceae	Karunchoori	Straggler	Fruits are eaten as raw
81	<i>Solanum nigrum</i> L.	Solanaceae	Manathakkali	Shrub	Leaves are used as a vegetable
82	<i>Solanum pubescens</i> Willd.	Solanaceae	Sundaikai	Shrub	Fruits are used as a vegetable
83	<i>Solanum trilobatum</i> L.	Solanaceae	Thuthuvalai	Shrub	Leaves are used as a vegetable
84	<i>Syzygium cumini</i> (L.) Skeels <i>Syzygium jambolanum</i> (Lam.) DC.	Myrtaceae	Naaval	Tree	Fruits are eaten as raw
85	<i>Tamarindus indica</i> L.	Caesalpinaceae	Puli	Tree	Fruits are eaten as raw
86	<i>Tarenna asiatica</i> (L.) Kuntze ex Schumann <i>Chomelia asiatica</i> (L.) Kuntze	Rubiaceae	Therani	Tree	Fruits are eaten as raw
87	<i>Terminalia bellirica</i> (Gaertner) Roxb.	Combretaceae	Bhathanimaram	Tree	Fruits are eaten as raw
88	<i>Terminalia chebula</i> Retz.	Combretaceae	Kadukai	Tree	Fruits are used as make a pickle.
89	<i>Tinospora cordifolia</i> (Willd.) Hook.f.& Thomson	Menispermaceae	Seenthil kodi	Climbing shrub	Leaves are used as a vegetable
90	<i>Toddalia asiatica</i> (L.) Lam.	Rutaceae	Milakaranai	Straggler	Leaves are used as a vegetable
91	<i>Trianthema portulacastrum</i> L.	Aizoaceae	Saaranai	Herb	Leaves are used as a vegetable
92	<i>Tribulus terrestris</i> L.	Zygophyllaceae	Nerunji	Herb	Leaves are used as a vegetable
93	<i>Wattakaka volubilis</i> (L.f.) T. Stapf	Asclepiadaceae	Perum kurinjan	Straggler	Leaves are used as a vegetable
94	<i>Ziziphus oenoplia</i> (L.) Miller	Rhamnaceae	Nare ilandhai	Tree	Fruits are eaten as raw
95	<i>Ziziphus mauritiana</i> Lam. <i>Ziziphus jujube</i> (L.) Gaertner, non Miller	Rhamnaceae	Ilandhai maram	Tree	Fruits are eaten as raw

CONCLUSION

It was concluded that, the local inhabitants of the study area use 95 plants as wild food plants. These are not only delicious and refreshing but also rich in nutrients such as fats, carbohydrates and proteins. Due to their rich nutrient values most the tribal communities depend on these wild plants for their livelihood as well as commercial purposes. These wild edible plants grow in organic rich soil and in pollution free area. They are not exposed to any artificial chemical fertilizers and are enriched with natural nutrients. Consumption of these wild edible plants makes the tribal people less prone to diseases and they have more strength when compared to people in plains. Useful wild plants in ethnic ecosystems show a trend of utilization of locally available resources both in areas with high plant diversity and marginal habitats. The oral transferrable of the indigenous knowledge of conventional uses of wild plants between elder and younger generation is not always ensured. Now a day the traditional knowledge is declining due to lack of interest in the present generation and also absence of records about the useful plants. Based on the present study, it is suggested that the nutritional analysis of some potential underutilized plant species may lead to the discovery of a new food sources then it will help to protect the intellectual property of these tribe. Hence, the truthful indigenous knowledge is immediately to be documented and validated for serving future generations and their nutritional values should be analyzed.

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