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Herbal Wealth of the Coastal Village of Melmidalam, Tamilnadu, India

Maybel Starlin.N

Department of Botany and Research Centre, Nesamony Memorial Christian College, Marthandam, Kanyakumari District-629165, Tamilnadu, India

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ABSTRACT

The district of Kanyakumari lies at geographical co-ordinates between 77° 15' and 77° 36' east and 8° 03' and 8° 35' north. The district is located at the southerly point of Peninsular India. Kanyakumari district is often cited as 'Land's end'. Kanyakumari has 504.86 sq.km. of government forests which can be calculated as 30.2 percent of the total area of the territory. The average rainfall of the district is 1456.8 mm per annum. Unlike other districts in Tamil Nadu, Kanyakumari receives a fairly good rainfall from both southwest and northeast monsoons. Kanyakumari coastal line has a length of about 71.5 km. Melmidalam is a coastal Village on the shore of the Arabian Sea in Kanyakumari district, Tamil Nadu, India. It is situated near the border of Tamil Nadu and Kerala. This village is the part of Midalam Panchayat of Killiyoor Block, Vilavancode taluk. Coastal region is an ecological storehouse of biodiversity. The plants are playing a vital role in protecting the coast from erosion and flooding. These coastal villages have a population of 1, 48,539 fishermen, forming 19 percent of the total fisherman population (7, 90,408) in Tamil Nadu. The potential availability of medicinal plants in wild areas is threatened by rising use and overexploitation, which raises concern about their conservation. Hence the present study was undertaken to document the ethnomedicinal knowledge of Melmidalam village, to assess the medicinal plant diversity of the coasts and to enumerate information about morphologically useful parts of the medicinal plants to cure various ailments.

Key words: Ailments, biodiversity, ethnomedicinal knowledge, Melmidalam.

INTRODUCTION

The highest attention has been given to documenting the biological resources and associated indigenous knowledge that exist within a nation. One of the most significant fields of research in the world today, plants has been essential in the treatment of ailments from prehistoric times. Humanity has relied on plants for healing since the dawn of civilization, a practice that endured the development of modern medicine and gained renewed vigor at the end of 29th century.[1] Since traditional medicine mainly relies on locally accessible plant species and plant based products and makes use of the traditional wisdom repository of information, it is practiced all over the world.[2]Traditional medicine is used far more frequently than modern medicine because it is culturally acceptable, economically accessible and more effective against some types of ailments. As a result, numerous local populations around the world have a native understanding of a variety of medicinal plants and they use their observations and experiences to classify plants and plant parts to be employed when treating various maladies.[3] Traditional medicine has remained popular throughout the developing world, and its usage is expanding quickly in developed nations.[4] India is exceptional in that all social classes employ plants and plant parts, either directly as folk remedies in various indigenous systems of medicine or indirectly in pharmaceutical preparations of

contemporary medicine. India is endowed with such a rich abundance of medicinal plants.[5] Based on many Indian medical traditions, including Ayurveda, Unani and Siddha, the knowledge of medicinal plants has been amassed over many years.[6] The most significant prehistoric sources of knowledge on medicinal plants are the Rigveda and Atharveda, which date back to 2000-1000 BC, as well as various post vedic treatises, including the Charakasamhita(100 AD), Sushruthasamhitha(100-800AD) and Dhanwanthari Nighantu(1200AD).[7] One of the most successful criteria used by the pharmaceutical industry to find new therapeutic molecules for the various sectors of biomedicine is ethnomedical applications of plants[8].

Traditional medical practices have a significant impact on India's public health care system and religion and ethnicity are closely entwined with medicine.[9] In the past 20 years, there has been some significant advancement in the study of medicinal plants and their traditional uses across India.[10] Before modern medicine was introduced into the healthcare system, indigenous people used medicinal plants all around the world.[11] There has been arise in the study of medicinal plants and their traditional uses in various regions of India over a past few decades, and there are several accounts on the use of plants in traditional Indian healing by either tribal people or indigenous populations.[12-19]

However, in rural regions, individuals, particularly older people and women, have sufficient information about this thriving natural gem, which is a gift from God to mankind.[20] As a result of years of experimentation, rural communities now have relevant knowledge about a variety of herbal treatments. This information was passed down to them from their ancestors as folklore and is frequently held as a well guarded secret, Because they live in remote places without access to contemporary scientific equipment for diagnosis and treatment, the methods they employ to diagnose various illnesses are quite fascinating. But they use medicinal plants that are readily available to treat illnesses.[21] Plant based medicines play a significant role in health management in nations like India with well established traditional medical systems. However, recent developments in instrumentation and bioinformatics (computational approaches) have expanded the possibilities for drug discovery; opening up new opportunities for application of this information in drug development research. [22] The purpose of the current study was to examine and record the local people's knowledge of medicinal plants and to assess the value of them in the community's health care system. The study also attempted to inform locals and traditional healers about the abundance of herbs in the study area.

MATERIALS AND METHODS

Study Area

The present study was conducted in the Melmidalam coastal village. Melmidalam is a village in Vilavancode Taluk, Killiyoor constituency, south west side at Arabian Sea Coast. This village has coastal Villages on the shore of the Arabian Sea in Kanyakumari district, Tamil Nadu, India. It was situated near the border with Tamil Nadu and Kerala on north-west to Kanyakumari and southwest to Trivandrum. These villages are located nearly 70 km from Kanyakumari and 30 km from Trivandrum. Kanyakumari district is situated in the Southernmost tip of Tamil Nadu, Southern Peninsular India (77° 15′-77° 30′ E, 8° 30′-8° 15′ N), located in the part of Southern Western Ghats. It occupies an area of about 1684 sq.km, which is 1.29 percent of the total geographical area of the state. Kanyakumari coastal line has a length of about 71.5 km. The location of the study area had latitude 8.28 and longitude 77.11.

Data Collection

Regular field trips were made during the study period. The information was collected from the coastal people. A total of 72 were interviewed and obtained information, mainly concerning their knowledge on

medicine from the plants and their parts, local names etc. The biological information of the studied plant material was recorded in the field note book. Informants were asked to guide to the places where these plants grow or to bring the drug they use. The medicinal uses of plants were checked through the literature available. The medicinal property of each plant was accepted as valid if at least five separate informants had a similar opinion.

Standard method was followed in the preparation of herbarium viz. collection of plant materials, drying, mounting, preparation and preservation of plant specimens.[23] Voucher specimens of medicinal plants were collected in triples. Specimens were identified and arranged in alphabetical order of family name. The identification and nomenclature of the enlisted plants were done with the Flora of Presidency of Madras [24] and the Flora of Tamil Nadu Carnatic.[25] The voucher specimens were processed in the customary way and deposited in the herbarium of Botany, Nesamony Memorial Christian College, Marthandam. A systematic enumeration of medicinal plants has been arranged in alphabetical order. However botanical name, family, local name, common name where ever available, habit, growth form, useful parts followed by medicinal uses.

RESULTS

The results of the survey are given in Table 1. Present study comprises 57 species of plants that are used by the people of the area. The present study was carried out with the objective of documenting the medicinal plant species from Melmidalam coastal village. Vilavancode Taluk,, Kanyakumari District,Tamilnadu, used by the local inhabitants to treat various diseases.

Diversity of Ethnomedicinal Plants

Present survey documented a total of 57 plant species belonging to 52 genera and 33 families were recorded. Of these 34 (45%) were herbs, 19 (25%) were shrubs, 13 (17%) were trees and 10 (13%) were climbers/creepers Botanical name of plants with their families, local name, Habit and life forms are given in Table 1.

These tables give the data collected from the local inhabitants through questionnaire and oral interview method. This study reveals that different parts of the plants were used by the inhabitants by various modes of administration.

Of the 57 taxa, dicots were represented by 51 species belonging to 27 families and monocots by 6 species belonging to 6 families. Based on the growth forms, total of 17 annuals species (30%) and 40 perennials (70%) were recorded from the study area. Family wise distribution shows that Euphorbiaceae was the dominant family represented by 8 species followed by Fabaceae 5 species, Acanthaceae 4 species, Malvaceae, Amaranthaceae and Lamiaceae 3 species each, Rutaceae, Asteraceae, Convolvulaceae and Verbenaceae 2 species each and all other families were represented by 1 species each. Euphorbiaceae have 8 species under 5genera, Fabaceae have 5 species under 5 genera, followed by Acanthceae have 4 species under 4 genera, Malvaceae, and Lamiaceae are represented by 3 species under 3 genera each, Rutaceae, Asteraceae, Convolvulaceae and Verbenaceae are represented by 2 species under 2 genera each and all other families are represented by 1 species each.

Life Forms

The percentage of various Life forms of documented plants used to control various ailments is shown in Fig.1. The study proves that herbs are the dominant species followed shrubs, trees and twiners. It is revealed that herb (54%), constituted the largest number. Gradually lesser representation is by shrubs (28%), trees (147%), twiners (4%). (Table.2). All the species are available in the wild except a few cultivated in home gardens for day to day life special utility (e.g. *Murraya koenigii, Ocimim sanctum, Piper betle, Zingiber officinale, Phyllamthus emblica* and *Lawsonia inermis*). These plants are

used for specific purposes in their culinary recipes also.

Part Used for the Preparation of Medicine

In the present study the various plant parts used as medicines were leaves (26), whole plant (15), Root (6), Flower (5), Fruits (3), Roots (3), stem (3), seed (3), and wood (1). Leaves are the most used part. Entire plants are extracted for medicinal purposes in case of herbs. (Fig. 1). Among the various parts used, utility of leaf (46%) is the highest followed by entire plant (26%), root (11%), flower (9%), fruits (5%), roots (5%), stem (5%), seed (5%) and wood (2%). This result is in accordance with the report that leaves are the most frequently used part. [26]

Route of Administration and Dosage

Most of the medicinal plants were collected from wild habitats. Preparations for skin diseases, joint pains, inflammations and wounds were used as external applications. On the other hand most of the remedies were taken orally and internal problems like jaundice, asthma, insomnia are treated with internal administration of the remedies. The medicinal remedies are mostly used in the form of decoction, poultice, paste, powder and in mixed preparations. They were also used in direct application of the paste for ailments like skin diseases, wounds, poison bites, rheumatism and hair fall. The mode of preparations is paste, infusion, extract, juice, decoction and powder.

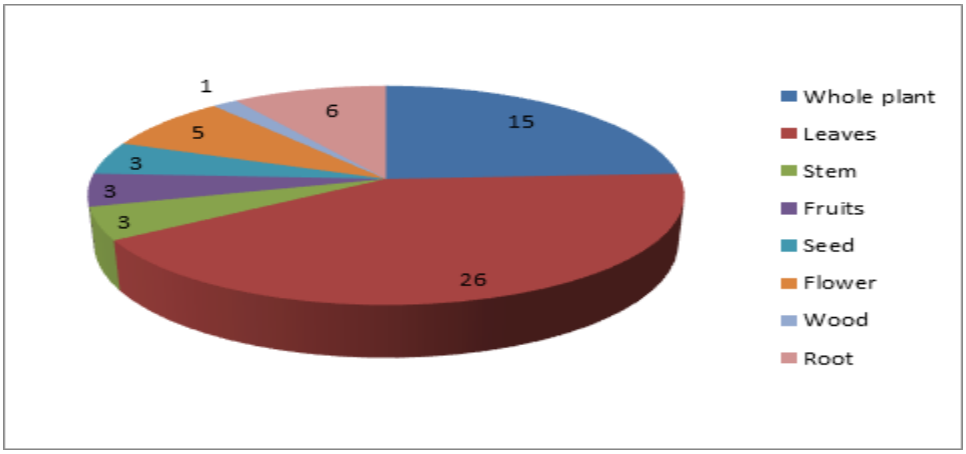

Fig.1 Number of Medicinal Plants and their parts used

Table 1 Plants of the study area with scientific name, parts used and diseases treated

S.No	Name of the plant and family	Local name	Habit	Part used	Disease treated
1	*Abrus precatorious* L.Fabaceae	Kuntimoni	Perennial Twiner	Leaves, root	Leucorrhorea, Rheumatism
2	*Abutilon indicum* (L.) Malvaceae	Thuthi	Annual Shrub	Leaves	Piles
3	*Acacia nilotica* (L.)Delile Fabaceae	Karuvel	Perennial Tree	Stem	Dysentry,
4	*Acacia catecheu* L.f.)Wild Fabaceae	Karunkali	Perennial Tree	Wood	Sore throat
5	*Achyranthes aspera* Linn. Amaranthaceae	Nayuruvi	Annual Herb	Leaves, root	Asthma, piles
6	*Adhatoda vasica* (L.) Nees Acanthaceae	Adathodai	Perennial Shrub	Leaf	Bronchitis
7	*Aegle marmelos* (L.) Rutaceae	Vilankai maram	Perennial Tree	Tender leaves	Blood pressure
8	*Aerva lanata* (L.) Juss Amaranthaceae	Sirukanpeelai	Perennial Herb	Whole plant	Kidney stone
9	*Aloe barbadensis* Mill. Liliaceae	Sirukattazhai	Perennial Herb	Leaf	Burns, Diabetes
10	*Alternanthera sessilis*(L.)R.Br.ex DC Amaranthaceae	Ponnankanni	Annual Herb	Whole plant	Eye infection
11	*Andrographis echioides* (L.) Nees. Acanthaceae	Kopuramthangi	Annual Herb	Leaf	Fever, piles
12	*Andrographis paniculata* (Burm.f.)Nees Acanthaceae	Kirisathu	Perennial Herb	Whole plant	Covid 19, Diabetes, Fever
13	*Azadirachta indica* A.Juss Meliaceae	Vaeppamaram	Perennial Tree	Flower	Anemia
14	*Boerhaavia diffusa* Linn Nyctaginaceae	Charanai	Perennial Herb	Whole plant	Blood pressure
15	*Borassus flabellifer* Linn Palmaceae	Panai	Perennial Tree	Inflorescence	Stimulant, diuretic
16	*Calotropis gigantea* R.Br. Asclepiadaceae	Erukku	Perennial Shrub	Root	Asthma, bronchitis

Table -1 To Be Continued					
17	*Cardiospermun helicacabum* L. Sapindaceae	Uzhignai	Annual Twiner	Whole plant	Rheumatism
18	*Carica papaya* L. Caricaceae	Pappali	Perennial Tree	Leaf	Dengue fever
19	*Commelina benghalensis* L. Commelinaceae	Canavazhai	Perennial Herb	Whole plant	Skin infection
20	*Crotalaria retusa* Linn. Fabaceae	Kilukiluppai	Annual Herb	Whole plant	Scabies
21	*Croton tiglium* L. Euphorbiaceae	Nervalam	Perennial Herb	Seed oil	Constipation
22	*Cynodon dactylon* Linn. Poaceae	Arugampul	Perennial Herb	Leaf	Constipation, Blood pressure
23	*Datura stramonium* L. Solanaceae	Oomathai	Perennial Shrub	Leaf	Head infection
24	*Emilia sonchifolia* DC. Asteraceae	Muyalchevi	Annual Herb	Leaves	Throat infection
25	*Euphorbia hirta* L. Euphorbiaceae	Ammanpacharisi	Annual Herb	Latex	Warts of leg
26	*Euphorbia ligularia* Roxb. Euphorbiaceae	Elaikalli	Annual Shrub	Leaf	Constipation, inflammation
27	*Euphorbia tirucalli* L. Euphorbiaceae	Thirukalli	Perennial Shrub	Stem	Stomach disorders
28	*Evolvulus alsinoides*(L.) Convolvulaceae	Vishnukiranthi	Perennial Herb	Whole plant	Sleeplessness
29	*Hibiscus rosa sinensis* L. Malvaceae	Chemparuthi	Perennial Shrub	Flowers	Heart disease, Hair growth
30	*Hybanthus enneaspermus* (L.) F.Muell. Violaceae	Orithazh thamarai	Annual Herb	Whole plant	Dermatitis, anemia
31	*Hyptis suaveolens* Poit. Lamiaceae	Narichappachilai	Annual Herb	Leaf	Cuts, wounds
32	*Ipomoea biloba* Forsk. Convolvulaceae	Athampu	Perennial Herb	Leaf	Skin infection. Ulcer
33	*Jatropa curcas* L. Euphorbiaceae	Kaattuamanakku	Perennial Shrub	Leaves, seed	Piles, fever, galactogogue
34	*Justicia procumbens* L. Acanthaceae	Ottupullu	Perennial Herb	Leaves	Fever, eyepain
35	*Lantana camara* Linn. Verbenaceae	Unnichedi	Perennial Shrub	Leaves	Tetanus, rheumatism
36	*Lawsonia inermis* L. Lythraceae	Maruthonti	Perennial Shrub	Leaf, Flower	Hair growth
37	*Leucas aspera* Spreng. Lamiaceae	Thumbai	Perennial Herb	Whole plant	Bronchitis
38	*Mimosa pudica* L. Fabaceae	Thottalvaadi	Perennial Herb	Leaf	Wounds
39	*Molluo pentaphylla* L. Molluginaceae	Parpadagam	Annual Herb	Whole plant	Constipation, inflammation
40	*Moringa oleifera* Lam. Moringaceae	Murungai	Perennial Tree	Bark, leaves	Blood pressure, flatulence, anemia
41	*Murraya koenigii* Spreng. Rutaceae	Curryveppilai	Perennial Shrub	Leaves	Stomachache
42	*Ocimum sanctum* L. Lamiaceae	Thulasi	Annual Herb	Leaf	Fever, sinusitis
43	*Opuntia elatior* Mill. Cactaceae	Chappathikalli	Perennial Herb	Fruit, stem	Asthma, Joint pain
44	*Pandanus leram* Lam Pandanaceae	Kaidhai	Perennial Shrub	Leaves	Leucoderma, Scabies
45	*Phyllanthus amarus* L. Euphorbiaceae	Keezhanelli	Perennial Herb	Whole plant	Anemia, Jaundice
46	*Phyllanthus emblica* L. Euphorbiaceae	Nelli	Perennial Tree	Fruits	Diabetes, Hairtonic
47	*Piper betle* (L.) Piperaceae	Vetilai	Perennial Herb	Leaves	Flatulence
48	*Polycarpaea corymbosa* Lam. Caryophyllaceae	Nilaisedachi	Annual Herb	Whole plant	Antidote, jaundice
49	*Ricinus communis* L. Euphorbiaceae	Amanakku	Perennial Shrub	Seed oil	Constipation. Joint pain
50	*Scoparia dulcis* L. Scrophulaiaceae	Kallurukky	Annual Herb	Whole plant	Kidney stone
51	*Sida cordifolia Linn* Malvaceae	Kurunthotti	Perennial Herb	Roots	Rheumatism
52	*Stachytarpheta indica* (L.)Vahl. Verbenaceae	Seemainayuruvi	Perennial Shrub	Leaves, Flowers	Ulcers, rheumatism
53	*Tabernaemontana divaricata* (L.) R.Br. Apocynaceae	Nanthiyavattom	Perennial Shrub	Flower	Eye injury
54	*Tribulus terrestris* L. Zygophyllaceae	Nerunchil	Perennial Herb	Fruits	Impotency, Kidney diseases
55	*Vernonia cinerea* (L.)Less Asteraceae	Poovankuranthal	Annual Herb	Whole plant	Insomnia
56	*Zingiber officinale* Rosc. Zingiberaceae	Inji	Annual Herb	Rhizome	Stomachache
57	*Zizyphus jujuba* Lamk. Rhamnaceae	Elanthai	Perennial Shrub	Root, leaves	Fever, wounds

Table 2 Distribution of Life forms

Life forms	Number of species	Percentage (%)
Herbs	31	54
Shrubs	16	28
Trees	8	14
Twiners	2	4

DISCUSSION

Medical plants (MPs) are a diverse group of plant species with medicinal characteristics.[27] Indigenous knowledge of the local inhabitants of Melmidalam village about the flora of their locality was gathered using proper procedure and the data revealed the availability of 57 plant species belonging to 52 genera and 33 families of valuable plants in the study area. Herbs (54%) dominated their therapies. Herbs were reported to be the most widely used life form. Similar results were obtained in other studies carried out in different parts of the world. [28] Among the parts leaves (46%) are the most used part by the local people. Leaves are more effective as a remedy for ailments than other parts of the plant. [29] In contrast to other plant parts leaves are also highly utilized, since they are obtained easily in large quantities. Leaves are considered to accumulate active ingredients by photosynthetic pigments such as alkaloids and tannins. So, majority of traditional healers prefer to use the leaves.[30, 31] Local herbal healers prescribe remedies in various forms such as decoction, infusion, extract, juice, paste etc both as internal as well as external applications. The findings of this study reveal that common plant species seen around us also play an important role in the treatment of various ailments. Since the plants and their parts and products are cheap, easily available and having no side effects, the use of them in the treatment has great advantages. [32]To keep alive the traditional knowledge for the use of future generations' compilation of such valuable information is the utmost essential. For large scale use of the plants or their preparations, scientific validation of this knowledge by isolation and purification of the phytoconstituents is recommended. There is chance for disappearance of some plant species in near future. Therefore, appropriate measures should be taken to conserve these plants for healthy and disease free life.

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REFERENCES

1. Sullivan K,Sheally CN. Complete Natural Home Remedies. (Element Books Limited, Shaftesbwey U. K), 1997:
2. Awas T, Demissew S.. Ethnobotanical study of medicinal plants in Kafficho people, southwestern Ethiopia. In: Svein, E., Harald, A., Birhanu, T., Shiferaw, B. (Eds.), Proceedings of the 16th International Conference of Ethiopian Studies, vol. 3. NTNU-Trykk Press, Trondheim, Norway, 2009 pp. 711–726
3. Omoruyi BE, Bradley G, Afolayan A.J. Ethnomedicinal survey of medicinal plants used for the management of HIV/AIDS infection among local communities of Nkonkobe Municipality, Eastern Cape, South Africa. J. Med. Plants Res. 2012; 6: 3603–3608.
4. Ramawat KG, Goyal S. The Indian herbal drugs scenario in global perspectives. In: Ramawat, K.G., Merillon, J.M (eds) Bioactive Molecules and Medicinal Plants. Springer, Berlin Heidelberg New York, 2008; p 323
5. Lone PA, Bhardwaj AK, Bahar FA. A study of some locally available herbal medicines for the treatment of various ailments in Bandipora district of Jammu and Kashmir, India. International Journal of Pharma and Bio Sciences, 2013a; 4(2): 440-453.
6. Alagesaboopathi C. Ethnomedicinal plants used by Kurumba tribals in Pennagaram region Dharampuri district of Tamilnadu. Asian Journal of Experimental Biological Sciences, 2011; 2(1), 140-142.
7. Rajith NP, Nawas M, Thaha AM, Manju MJ, Anish N, Rajesekharan S, George V. A study on traditional mother care plants of rural communities of south Kerala. Indian Journal of Traditional Knowledge, 2010; 9(1), 203-208S.M.K. Rates, Plants as source of drugs, Toxicon. 2001; 39: 603-613.

8. Williams LAD. Ethnomedicine Editorial. West Indian Medicine Journal, 2006; 55(4): 215.
9. Broom A, Doron A, Tove A. The inequalities of medicinal pluralism: hierarchies of health, the politics of tradition and the economics of care in Indian oncology, Soc. Sci. Med. 2009; 69: 698-706
10. Nimasow, Gibji, Ngupok, Ringu, Nimasow, Oyi Dai, Ethnomedicinal knowledge among the Adi tribes of lower Dibang valley district of Arunachal Pradesh, India, J. Pharm. 2012;3(6): 2230-8407.
11. Aburai T, Hudaib M, Tayyem R, Yosef M, Qishawi M. Ethnopharmacological survey of medicinal herbs in Jordan, the Alioun Heights region, J. Ethnophar. 2007; 110:294-304
12. Maruthi KR, Krishna V, Manjunatha BK, Nagaraja VP. Traditional medicinal plants of Davanagere district, Karnataka with reference to cure skin diseases. *Environment and Ecology*. 2000;18:441–446
13. Natarajan B, Paulsen BS. An ethnopharmacological study from Thane district, Maharashtra, India: Traditional knowledge compared with modern biological science. *Pharmaceutical Biology*. 2000;38:139–151.
14. Samvatsar S, Diwanji VB. Plant sources for the treatment of jaundice in the tribals of Western Madhya Pradesh of India. *Journal of Ethnopharmacology*. 2000;73:313–316. doi: 10.1016/S0378-8741(00)00274-9.
15. Harsha VH, Hebbar SS, Hegde GR, Shripathi V. Ethnomedical knowledge of plants used by Kunabi Tribe of Karnataka in India. *Fitoterapia*. 2002; 73:281–287
16. Hebbar SS, Harsha VH, Shripathi V, Hegde GR. Ethnomedicine of Dharwad district in Karnataka, India–plants used in oral health care. *Journal of Ethnopharmacology*. 2004; 94:261–266
17. Kala CP. Ethnomedicinal botany of the Apatani in the Eastern Himalayan region of India. *Journal Ethnobiology and Ethnomedicine*. 2005;1:11
18. 18.Chhetri DR, Parajuli P, Subba GC. Antidiabetic plants used by Sikkim and Darjeeling Himalayan tribes, India. *Journal of Ethnopharmacology*. 2005; 99:199–202
19. Saikia AP, Ryakala VK, Sharma P, Goswami P, Bora U. Ethnobotany of medicinal plants used by Assamese people for various skin ailments and cosmetics. *Journal of Ethnopharmacology*. 2006
20. Mahmood A, Mahmood A, Shaheen H, Qureshi RA, Sangi Y, Gilani SA .Ethnomedicinal survey of plants from district Bhimber Azad Jammu and Kashmir, Pakistan. Journal of Medicinal Plants Research, (2011); 5(11), 2348-2360
21. Santhya B, Thomas S, Isabel W, Shenbagarathai R. Ethnobotanical plants used by the Valaiyan community of Piranmalai Hills (Reserved Forest), Tamilnadu, India-a pilot study. African Journal of Traditional, Complementary and Alternative Medicines, 2006; 3(1): 101-114.
22. Ramawat KG. Secondary metabolites in nature. In: Ramawat, K. G., Merillon, J. M (eds) Biotechnology: Secondary Metabolites. Science Publishers, Enfield, CT, 2007; p 21.
23. Jain SK. The role of Botanist in folklore research, Folklore 5 (1964) 145-150
24. J.S. Gamble, The flora of the presidency of Madras, Adlard & Son Ltd., London, 1935
25. Matthew KM. The flora of the Tamil Nadu Carnatic, The Rapinat Herbarium, St. Josephs College, Tiruchirapalli, India, 1983
26. Ezekiel A, Daniel PK. Ethnomedicinal study of plants used in villages around Kimboza forest reserve in Morogoro, Tanzania. Journal of Ethnobiology and Ethnomedicine, 2012: 8(1): 1-9.
27. Jamshidi-Kia F, Lorigooini Z, Amini-Khoei H. Medicinal plants: Past history and future perspective. Journal of Herbmed Pharmacology, 2018:7(1): 1–7.
28. Balamurugan S, Vijayakumar S, Prabhu S, Morvin Yabesh JE. Traditional plants used for the treatment of gynaecological disorders in Vedaranyam taluk, South India - An ethnomedicinal survey. J. of Trad. and Complementary Medicine. 2017; 8(2): 308-323
29. Umair M, Altaf M, Abbasi AM. An Ethno botanical Survey of Indigenous Medicinal Plants in Hafizabad District, Punjab-Pakistan. PLoS ONE, 2017: 12(6): 1-22.
30. Passulacqua NG, Guariera P, De Fine G. Contribution to the knowledge of folk plant medicine in Calabria region. Southern Italy. Filoterapia. 2007 ;(78):52–68
31. Fortini P, Di Marzio P, Guarrera P, Iorizzi PM. Ethnobotanical study on the medicinal plants in the Mainarde Mountains (central-

southern Apennine, Italy) J. Ethnopharmacol. 2016 ;(184):208– 218.
32. Susmita S, Jain AK, Tomar R.S. Ethno veterinary practices –A review on phytotherapeutical approaches in treatment of animals. World J. of Pharmaceutical and Medical Research. 2017; 3(1): 96-100.

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