



RESEARCH ARTICLE

Ethnomedicinal plants used by the Vetans of Kanniyakumari District, Tamil Nadu, India

S. Jayakumar¹, M.S. Kala Swarna², T.S. ShyninBrintha³, C. Domettila⁴, R. Mary Sujin⁵,
A. R. Florence⁶, A. AyunVinuba⁷, V. Sathia Geetha⁸ and S. Jeeva^{3*}

¹Assistant Professor, Department of Botany, Nesamony Memorial Christian College, Marthandam, Kanyakumari, Tamil Nadu, India.

²Research Scholar, Department of Botany, Scott Christian College (Autonomous), Nagercoil, Tamil Nadu, India.

³Assistant Professor, Department of Botany, Scott Christian College (Autonomous), Nagercoil, Tamil Nadu, India.

⁴Assistant Professor, Department of Botany, St. Jude's College, Thoothor, Tamil Nadu, India.

⁵Assistant Professor, Department of Botany, P.T.M.T.M College, Kamuthi, Ramanathapura, Tamil Nadu, India.

⁶Assistant Professor, Department of Botany, Holy Cross College (Autonomous), Nagercoil, Tamil Nadu, India.

⁷Assistant Professor, T.D.M.N.S College, T. Kallikulam, Tirunelveli, Tamil Nadu, India.

⁸A.V.V.M. Sri Pushpam College. Poondi, Thanjavur, Tamil Nadu, India.

Received: 14 May 2022

Revised: 15 June 2022

Accepted: 18 July 2022

*Address for Correspondence

S. Jeeva

Assistant Professor,
Department of Botany, Scott Christian
College (Autonomous), Nagercoil,
Tamil Nadu, India.



This is an Open Access Journal / article distributed under the terms of the **Creative Commons Attribution License** (CC BY-NC-ND 3.0) which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. All rights reserved.

ABSTRACT

An ethnobotanical survey was carried out among the *Vetan* community people who inhabit in periphery of the southern Western Ghats of Kanniyakumari district. A total of 153 plant species distributed in 134 genera belonging to 60 families were identified as commonly used ethnomedicinal plants used by the *Vetan* communities for the treatment of various ailments. The documented ethnomedicinal plants were mostly used to cure skin diseases, fever, ulcer, cold and cough and rheumatism. Leaves were the most frequently used plant parts. Herbs (70 taxa) were the primary source of medicine, followed by shrubs (52 taxa) trees (30 taxa), climbers (8 taxa). Medicinal plants are arranged alphabetically to their botanical names, vernacular names, family, part of the plant used and ethnomedicinal uses are tabulated along with their major phytochemical constituents. This finding reveals that the study area rich in medicinal flora and the community people still using medicinal plants in their daily life. Traditional knowledge of





Jayakumar et al.,

this community people should be recorded before it disappears. Their knowledge should be saved for future generations. Pharmacological investigation should be done for the plants with more use for finding potential new drugs.

Keywords: Ailments, Ethnobotany, Kanniyakumari, *Vetan* Community.

INTRODUCTION

According to the World Health Organization (WHO) about 65-80 % of the world's population in developing countries depends essentially on plants for their primary healthcare due to poverty and lack of access to modern medicine (1). About 85% of the rural population of India depends on varieties of plants for the treatment of various diseases they suffer from (2). India is rich in cultural and floristic diversity and also storehouse of ethnobotanical knowledge. The indigenous tribal communities possess a broad knowledge about medicinal plants, passed through oral communication from generation to generation (3). The knowledge of the tribes, associated with the traditional healing practices using plants, is now fast disappearing due to modernization, rate of deforestation with the concurrent loss of biodiversity, there is a need for accurate documentation of the tribal knowledge. During the last few decades there has been an increasing interest in the study of medicinal plants and their traditional use in different parts of India. In the recent years number of reports on the use of plants in traditional healing by either tribal people or indigenous communities of India is increasing (4-8). There is no report available in the literature about *Vetan* community people. Therefore this study was undertaken to ascertain the detailed information on plants used by *Vetan* community people and their usage based on ethnobotanical knowledge.

MATERIALS AND METHODS

Study area and people

Shankaranputhur is a small village situated near Kulasekeranputhur, with 40 acres of land in Kanniyakumari district and covers an area of nearly 1684 sq. kms. This village was named after 'Shankaranthambi' who was the Divan of Travancore King. In Tamil language the word 'Vettuvan' or 'Vetan' means hunter. Most of the people are farmers. The grains produced were transported to Travancore Samasthanam with the help of bullock carts. Farmers suffered a lot to bring their yield to Samasthanam. The King knew their difficulties and provided land as well a shield (*Cheppu Patayam*- shield containing details about *Vetan* community). *Vetan* community people have the knowledge of medicinal plants that are used for first aid remedies and other simple ailments. They still depend on medicinal plants to meet their primary healthcare needs.

Data collection

An ethnobotanical survey was conducted among the *Vetan* community people who inhabit Shankaranputhur village of Kanniyakumari district. Intensive field surveys were conducted between July 2019 and August 2020 according to the methods proposed by Martin (1995), with slight modifications. During the study trips, information were gathered by interviewing the local medicine men, experienced old aged people who have good knowledge about the medicinal uses of plants. Hundred seventy eight informants (98 males and 80 females) between the ages of 35-50 were consulted to gather information in the study area. Ethnobotanical information was collected through questionnaires and discussions among the informants in their local language (Tamil), which include formulations such as mode of preparation (*i.e.*, decoction, paste, powder and juice), diseases it cured and the dosage. Plant specimens were collected, prepared herbariums and identified with the help of local and regional floras (9,10). Plant names have been checked and updated with the online website (www.theplantlist.org) of the Royal Botanic Gardens, Kew. Herbarium specimens were deposited in the Department of Botany, Nesamony Memorial Christian College, Marthandam.



Jayakumar *et al.*,

RESULTS AND DISCUSSION

The present investigation revealed that the *Vetan* community people were using 153 plant species distributed in 134 genera belonging to 60 families for medicinal use. Euphorbiaceae (10 taxa) and Solanaceae (9 taxa) predominates followed by Amaranthaceae (8 taxa), Cucurbitaceae (8 taxa), Fabaceae (8 taxa), Verbenaceae (7 taxa), Lamiaceae (6 taxa), Asteraceae (5 taxa), Malvaceae (5 taxa), Moraceae (5 taxa), Rutaceae (5 taxa), Arecaceae (5 taxa), Mimosaceae (4 taxa), Poaceae (4 taxa), Caesalpiniaceae (3 taxa), Asclepiadaceae (3 taxa), Araceae (2 taxa), Apiaceae (2 taxa), Annonaceae (2 taxa), Convolvulaceae (2 taxa), Nyctaginaceae (2 taxa), Rubiaceae (2 taxa), Sapotaceae (2 taxa), Zingiberaceae (2 taxa) remaining families were monospecific. Ahmad *et al.* (11) and Ogbulie *et al.* (12) reviewed a variety of Euphorbiaceae family contains wide variety of phytochemicals including alkaloids, phenols, flavonoids, saponin, tannins and essential oils and described their origins, characteristics and their therapeutic uses. For each species, botanical names, local names, family, habit, part used, method of preparation, ailments treated and the phytochemical constituents are provided (Table 1).

Vetan community people are using these plants to cure diseases like asthma, blood pressure, chicken-pox, constipation, cough & cold, diabetics, diarrhea, epilepsy, fever, bone fracture, headache, jaundice, malaria, menstrual disorder, oral disease, (bleeding gums, mouth blisters, tooth ache), piles, poison bites (dog bite, snake bite), skin diseases (eczema, leprosy, ring worm, burns, cut, wounds), stomach complaints (ulcer). Similar studies were done among *Kani* tribes of Pechiparai forest and documented 58 medicinal plants belonging to 27 families to treat various ailments (13). Herbs (70 species) 44% were found to be the most used plants species followed by shrubs (52 species) 32 %, trees (30 species) 19% and climbers (8 species) 5% (Figure 1). The frequent use of herbs among the indigenous communities is the result of a wealth of herbaceous plants in their environs (3). Among the different plant leaves (80 species) were most frequently used for the traditional medicine preparation followed by fruits (40 taxa), roots (28 taxa), whole plant (15 taxa), bark, seed and stem (10 taxa each), bulbs (2 taxa), rhizome (5 taxa), tuber (4 taxa). Many indigenous communities elsewhere also utilized mostly leaves for medicine preparation (14-17). Medicines were prepared in the form of paste, powder, juice, infusion and decoction. Preparing paste for the treatment of ailments was a widespread practice among the tribal communities in India (3).

In the present study, plants like *Abutilon indicum*, *Phyllanthus amarus* were used for healing wounds, while *Eclipta prostrata*, *Vitex negundo* were used to cure head ache. *Punica granatum* was used to treat abdominal pain. *Terminalia catappa* used to treat asthma, *Cynodon dactylon* used for body ache, *Coccinia grandis* was used as a remedy for cholera, *Acalpha indica* to treat ear ache and constipation, *Ocimum tenuiflorum* leaf paste was used to cure cough, cold and ear ache and *Phyllanthus emblica* fruit was used to heal skin diseases and as a blood purifier. In the present study 4 plant species *Achyranthes aspera*, *Mukia maderaspatana*, *Raphanus sativus* and *Aristolochia bracteolata* were used to treat pneumonia, fever, cuts and wounds. These findings were correlated with the *Kani* tribals in Kanniyakumari district, Tamil Nadu, India (18) and Margala hills national park tribal people (19). In the present study, some of these plants are given for problems such as white discharge (*Tephrosia purpurea*), *Solanum surattense* and *Calotropis gigantea* are applied for tooth infections *Acalpha indica*, *Adhatoda vasica*, *Euphorbia hirta*, *Ocimum tenuiflorum*, *Solanum surattense* and *Leucas aspera* were used for asthma, cold, cough, and fever. The same plants were used by the tribals of Kanjamalai hills of Salem district of Tamil Nadu (20). The *Vetan* people used the stem and leave for decoction of *Solanum surattense* to cure fever, cough and asthma. These findings were compared with earlier work (21-23).

Kidney stone and urinary tract disorders are treated with *Beta vulgaris*, *Aerva lanata*, *Tridax procumbens*, *Tribulus terrestris* and *Ricinus communis* (19). In the present study 5 plant species (*Tephrosia purpurea*, *Acacia nilotica*, *Aerva lanata*, *Ipomea quamoclit* and *Tribulus terrestris*) were used to treat urinary tract disorders. The bulb juice of *Allium sativum* and *Allium cepa* plants were used to cure diabetes, hypertension, cooling agent for eyes and also to treat leprosy (23). Leaf extract of *Phyllanthus nodiflora* was used to reduce dandruff, skin related disease and for joint pains. Similarly, the same plant is used by the rural people of Attock district [21]. *Cynodon dactylon* was used to treat wounds and also used for cracks in foot (21-23). In addition major phytochemical constituents of the ethnomedicinal





Jayakumar et al.,

plants studied in this paper. Of the 153 plants studied, major phytochemical constituents are reported for 150 plants (Table 1). From this account it was clear that the *Vetan* community people, like other ancient communities have the awareness about the character of various plants and their beneficial properties.

CONCLUSION

This study shows that usage of plants for treating various ailments is still practiced by *Vetan* community people. Documentation of this knowledge is valuable for the communities and their future generations and for scientific consideration of wider uses of traditional knowledge. The findings of the investigation envisage that the medicinal plants have excellent potentiality to treat various ailments. Their mode of preparation and mode of administration are also easy and suitable and the treatment has no side effects. This study would provide some basic clues of medicinal properties of plants used by native of *Vetan* community of Shankaranputhur village, Kanniyakumari district of Tamilnadu. Ethnomedicinal studies clearly defined that the knowledge of medicinal plants is important not just for *Vetan* themselves but for the entire world.

REFERENCES

1. Farnsworth NR, Kerele O, Bingei AS (1985). Medicinal plants in therapy. *Buletin of the World Health Organisation*, 63: 965-981.
2. Farnsworth NR, Jain SK (1994) Ethnopharmacology and drug development, In: *Ethnobotany and search for New Drugs*, edited by DJ Chadwick & March U, (Ciba Foundation Symposium 183, Wiley, Chichester), pp. 153.
3. Sukumaran S, Sujin RM, Geetha VS, Jeeva S (2021) Ethnobotanical study of medicinal plants used by the Kani tribes of Pechiparai Hills, Western Ghats, India. *Acta Ecologica Sinica*, 41(5), 365-376.
4. Pradeesh DS, Sukumaran S, Jeeva S, Jenisha SR (2020) Ethnobotanical Studies of Kanies in Mothiramalai, Kilamalai Reserve Forest, Kalial Range, Kanniyakumari Forest Division, Tamilnadu. *High Technology Letters* 26(7): 989-1002.
5. Karuppusamy S (2007) Medicinal plants used by Paliyan tribes of Sirumalai hills of Southern India. *Natural product Radiance*, 6: 436-442.
6. Jeeva S, Florence AR, Sujin RM (2019) Therapeutic biology of *Gmelina asiatica* Linn. In *Ethnomedicinal Plants with Therapeutic Properties*, CRC Press, pp. 113-123.
7. Jeeva S, Joseph J, Sujin RM (2019) *Hyptis suaveolens* (L.) Poit.: a review of its ethnobotany, phytochemical, and pharmacological profile. *Ethnomedicinal Plants with Therapeutic Properties*, CRC Press, pp.125-148.
8. Prakash JW, Raja RD, Anderson NA, Williams C, Regini GS, Bensar K, Rajeev R, Kiruba S, Jeeva S, Das SSM (2008) Ethnomedicinal plants used by Kani tribes of Agasthiyarmalai biosphere reserve, southern Western Ghats. *Indian Journal of Traditional Knowledge*, 7(3): 410-413.
9. Gamble JS, Fischer CEC (1915-1935) *Flora of the Presidency of Madras*. Adlord and Sons Limited, London.
10. Nair NC, Henry AN (1983) *Flora of Tamil Nadu, India*, Botanical Survey of India, Coimbatore.
11. Ahmad M, Khan MA, Qureshi RA (2003) Ethnobotanical study of some cultivated plants of Chhuchh Region (District Attock), *Hamdard Medicus*, 46(3) :15-19.
12. Ogbulie JN, Ogueke OO, Okoli IC, Anyanwu BN (2007) Antibacterial activities and toxicological potentials of crude ethanolic extracts of *Euphorbia hirta*. *African Journal of Biotechnology*, 6: 1544-1548.
13. Subitha T, Ayyanar M, Udaya Kumar M, Sekar T (2011) Ethnomedicinal plants used by Kani tribals in Pechiparai forests of Southern Western Ghats, Tamilnadu, India. *Journal of Plant Science* 2, 349-354.
14. Laloo RC, Kharlukhi L, Jeeva S, Mishra BP (2006) Sacred forests of Mehalaya as a treasure house of Medicinal plants: effect of disturbance and population structure of important tree specioes. *Current Science*, 9(2): 225-232.
15. Jeeva S, Femila V (2012) Ethnobotanical investigation of Nadars in Atoor village, Kanniyakumari District, Tamilnadu, India. *Asian Pacific Journal of Tropical Biomedicine*, 2(2), pp.S593-S600.





16. Prakash JW, Raja RD, Anderson NA, Williams C, Regini GS, Bensar K, Rajeev R, Kiruba S, Jeeva S, Das SSM (2008) Ethnomedicinal plants used by Kani tribes of Agasthiyarmalai biosphere reserve, southern Western Ghats. *Indian Journal of Traditional Knowledge*, 7(3): 410-413.
17. Kingston C, Jeeva S, Jeeva GM, Kiruba S, Mishra BP, Kannan D (2009) Indigenous knowledge of using medicinal plants in treating skin diseases in Kanniyakumari district, Southern India. *Indian Journal of Traditional Knowledge*, 8(2): 196-200.
18. Ayyanar M, Ignacimuthu S (2005) Traditional knowledge of Kani tribals in Kouthalai of Tirunelveli hills, Tamilnadu India. *Journal of Ethnopharmacology*, 102 : 246- 255.
19. Katewa SS, Galav PK (2005) Traditional herbal medicines from Shekhawati region of Rajasthan. *Indian Journal of Traditional Knowledge*, 4(3): 237-245.
20. Alagesaboopathi C (2011) Ethnobotanical Studies on useful plants of Kanjamalai hills of Salem District of Tamil Nadu, Southern India. *Archives of Applied Science*, 3: 532-539.
21. Jenisha SR, Jeeva S (2014) Traditional remedies used by the inhabitants of Keezhakrishnanputhoor - a coastal village of Kanniyakumari district, Tamilnadu, India. *Medicinal and Aromatic plants*, 3(4): 175-180.
22. Sukumaran S, Brintha TSS, Subitha P, Sheeba YA, Jeeva S (2014) Usage of medicinal plants by two cultural communities of Kanniyakumari District, Tamilnadu, South India. *Journal of Chemical and Pharmaceutical Research*, 6(8): 67-79.
23. Kiruba S, Dhruw SK, Sahu PK, Geetha VS, Jeeva S (2014) Phytotherapeutic drugs used by the tribal folk of Achanakmar Amarkantak Biosphere Reserve, Central India. *International Journal of Pharma Research and Health Sciences*, 2(2), 157-65.

Table 1. List of ethnomedicinal plants used by the Vetan community people

Botanical name	Family	Local name	Common name	Useful parts	Habit	Medicinal uses/ Mode of usage
<i>Abelmoschus esculentus</i> (L.) Moench	Malvaceae	Vendai	Ladies finger	Fruit	Shrub	Daily intake of fruits helps in increasing the memory power and normalizes the blood sugar level.
<i>Abrus precatorius</i> L.	Fabaceae	Kunni	Crab's Eye	Leaf	Climber	Leaves with a little sugar chewed to get relieve from throat pain.
<i>Abutilon indicum</i> (L.) Sweet	Malvaceae	Thutti	Indian mallow	Leaf	Herb	Decoction is taken orally seven days for immediate recovery from bleeding piles
<i>Acacia nilotica</i> (L.) Willd	Mimosaceae	Karuvelam	Taruakadam	Bark	Tree	Bark paste applied on infectious parts to cure wounds, ulcer and gum mixture taken orally once a day to cure urinogenital discharges.
<i>Acalypha indica</i> L.	Euphorbiaceae	Kupaimeni	Indian copper leaf	Leaf	Herb	Leaf paste applied topically on scabies.
<i>Achyranthes aspera</i> L.	Amaranthaceae	Naiyurvi	Prickly chaf flower	Root	Herb	Root paste mixed with honey taken twice a day is given orally to cure cough.
<i>Acmella paniculata</i> (Wall. ex DC.) R.K.Jansen	Asteraceae	Manjal poochedi	Tooth ache plant	Flower	Herb	Flower paste applied externally to treat tooth ache.





Jayakumar et al.,

Botanical name	Family	Local name	Common name	Useful parts	Habit	Medicinal uses/ Mode of usage
<i>Acorus calamus</i> L.	Araceae	Vasambu	Sweet flag	Rhizome	Creepers	Rhizome decoction taken orally once in day to cure dysentery.
<i>Aegle marmelos</i> (L.) Correa	Rutaceae	Vilvam	Bengal quince	Fruit	Tree	Fruits and leaf decoction are taken for three day used to cure diarrhoea, fever.
<i>Aerva lanata</i> (L.) A. L. Juss. ex Schultes	Amaranthaceae	Sirukanpilai	Mountain knot grass	Leaf	Herb	Leaf decoction taken orally for 21 days used to cures kidney stone.
<i>Albizia lebeck</i> (L.) Benth.	Mimosaceae	Vagai	Lebeck tree, flea tree	Stem	Tree	Stem decoction are used to reduce cholesterol, cures asthma and rheumatism.
<i>Allium cepa</i> L.	Lilliaceae	Vengayam	Onion	Bulb	Herb	Bulb juice and paste used to treat ear ache and head ache.
<i>Allium sativum</i> L.	Lilliaceae	Vellaipundu	Garlic	Bulb	Herb	Daily intake of bulb cures gas trouble.
<i>Aloe vera</i> (L.) Burm. f.	Lilliaceae	Chothukathalai	Aloe	Root and Leaf	Herb	Root used to cure indigestion and leaf gel used to reduce Leucorrhoea.
<i>Alternanthera sessilis</i> (L.) R. Br. ex DC.	Amaranthaceae	Ponnangani keerai	Ruby alternanthera	Leaf	Herb	Daily intake of cooked leaves taken orally cures night blindness.
<i>Amaranthus roxburghianus</i> H.W.Kung	Amaranthaceae	Sirukeerai	Tumble weed	Leaf	Herb	Leaf paste is applied topically on affected places twice a day to heal wounds.
<i>Amaranthus spinosus</i> L.	Amaranthaceae	Mullukeerai	Prickly amaranth	Leaf	Herb	Cooked Leaves is taken orally used to cure anemia and fever.
<i>Amaranthus tricolor</i> L.	Amaranthaceae	Thandankeerai	Chinese spinach	Leaf	Herb	Decoction of leaves drunk to reduce the menstrual pain.
<i>Amaranthus viridis</i> L.	Amaranthaceae	Kuppaikeerai	Green amaranth	Leaf	Herb	Root decoction is used twice a day to control excess bleeding during menstruation.
<i>Amorphophallus paeoniifolius</i> (Dennst.) Nicolson	Araceae	Chenaikilangu	Elephant foot yam	Rhizome	Herb	Intake of cooked rhizome cures piles.
<i>Anisomeles malabarica</i> (L.) R. Br. ex. Sims	Lamiaceae	Perumthumbai	Malabar catmint	Leaf	Shrub	Leaves are boiled with water to cure rheumatic swelling and smoke inhaled to cure cough.
<i>Annona squamosa</i> L.	Annonaceae	Chethapalam	Custard apple	Leaf and Seed	Tree	Crushed leaf juice taken orally to heal stomach ulcers. Seed paste mixed with oil used to destroy lice from hair.
<i>Areca catechu</i> L.	Arecaceae	Pakkumaram	Areca nut	Seed	Palm	Seed paste is applied on infected parts to cure wounds.
<i>Aristolochia bracteolata</i> Lam.	Aristolochiaceae	Karudakodi	Ductman' s pipe	Leaf	Herb	Leaf paste is used applied topically to cure wounds and heals skin rashes.





Jayakumar et al.,

Botanical name	Family	Local name	Common name	Useful parts	Habit	Medicinal uses/ Mode of usage
<i>Artocarpus heterophyllus</i> Lam.	Moraceae	Palamaram	Jack fruit tree	Fruit	Tree	Fruits used to cure skin diseases and reduce cough.
<i>Artocarpus hirsutus</i> Lam.	Moraceae	Ayenissakai	Anjili	Fruit	Tree	An infusion of the bark is applied to cure small pimples and cracks on the skin.
<i>Azadirachta indica</i> A. Juss.	Meliaceae	Veppamaram	Neem	Leaf bark	Tree	Leaf paste used to cure skin diseases and bark powder used to promote tooth strengthening.
<i>Azima tetracantha</i> Lam.	Salvadoraceae	Esanku	Needle brush	Leaf	Tree	Leaves are used to cure cough.
<i>Basella alba</i> L.	Basellaceae	Pasalikeerai	Indian spinach	Leaf	Herb	Cooked leaves are edible cures fungal infection in stomach.
<i>Bauhinia tomentosa</i> L.	Caesalpiniaceae	Eruvachi	Bauhinia	Flower	Tree	Juice of flower is used to cure diarrhoea, dysentery and paste to cure skin diseases.
<i>Beta vulgaris</i> L.	Chenopodiaceae	Beetroot	Beet root	Root	Herb	Root paste applied on infected area to cure burning sensation.
<i>Boerhavia diffusa</i> L.	Nyctaginaceae	Mukkuurataik eerai	Pigweed	Whole plant	Herb	Whole plant decoction along with jaggery taken once a day used to cure stomachache and fever.
<i>Borassus flabellifer</i> L.	Aracaceae	Panaimaram	Palmyra palm	Young fruit	Tall palm	Pulpy kernel water of palmara applied on the eyes to cure eye ache.
<i>Calotropis gigantea</i> (L.) Dryand.	Asclepiadaceae	Erukku	Crown flower, milk weed	Root and bark	Shrub	Root and bark decoction along with palm sugar taken for 21 day's cures elephantiasis.
<i>Canna indica</i> L.	Cannaceae	Kalvalai	Indian shot	Rhizome	Shrub	Rhizomes extract acts as diuretic and taken three day's to cure fever.
<i>Capsicum frutescens</i> L.	Solanaceae	Kantharimilagu	Red chilly	Fruit	Shrub	Fruits are edible and reduce blood cholesterol.
<i>Capsicum annum</i> L.	Solanaceae	Milagai	Long chilly	Fruit	Shrub	Daily intake of fruit enhances blood circulation.
<i>Cardiospermum halicacabum</i> L.	Sapindaceae	Mudakathhan	Balloon vine	Leaf	Climber	Decoction of leaves are used to cure rheumatism.
<i>Carica papaya</i> L.	Caricaceae	Pappali	Papaya or melon like fruit	Fruit	Tree	Fruits are edible and increases eye vision.
<i>Cassia auriculata</i> L.	Caesalpinaceae	Avarpoo	Tannres cassia	Leaf	Shrub	Leaf paste taken orally to cure gas trouble problems.
<i>Casuarina litorea</i> (L.) Diss. Forest.	Casurinaceae	Chavukku	Casurina	Bark	Tree	Bark decoction taken orally cures fever.
<i>Catharanthus roseus</i> (L.) G. Don.	Apocynaceae	Nithayakalyani	Periwinkle	Whole plant	Herb	Whole plant paste taken orally are used to cure leukemia and hypertension.





Jayakumar et al.,

Botanical name	Family	Local name	Common name	Useful parts	Habit	Medicinal uses/ Mode of usage
<i>Centella asiatica</i> (L.) Urb.	Apiaceae	Vallarai	Water pennywort	Leaf	Herb	Handful of leaves applied on skin to cure skin infection. It increases a memory power.
<i>Chrysanthemum indicum</i> L.	Asteraceae	Sevanthi	Chrysanthus	Flower	Shrub	Flower extract is drunk to cure fever, head ache and hypertension.
<i>Cissus quadrangularis</i> (L.)	Vitaceae	Pirandai	Adament creeper	Stem	Climber	Cooked stem is taken orally to cure stomach aches.
<i>Citrullus colocynthis</i> (L.) Schrad.	Cucurbitaceae	Kumattikkai	Bitter apple fruit	Root	Herb	Root paste applied on head before bath used to promote hair growth.
<i>Citrus aurantifolia</i> (Christm.) Swingle	Rutaceae	Narthakkai	Bitter orange tree	Leaf, fruit	Shrub	Leaves and fruit extract used to cure vomiting, fever and diabetic problems.
<i>Citrus limon</i> (L.) Osbeck	Rutaceae	Elumichai	Lemon	Fruit	Shrub	Fruit juice is taken to cure indigestion and jaundice.
<i>Cleome gynandra</i> L.	Capparidaceae	Thivalai	African spider flower	Leaf	Herb	Juice of leaf used to cure rheumatism, head ache and ear ache.
<i>Clerodendrum phlomidis</i> L. F	Verbenaceae	Vathamadaki	Arni	Leaf	Shrub	Leaf paste is applied on the forehead to cure headache and also cures rheumatic pain
<i>Clitoria ternatea</i> L.	Fabaceae	Sangupuhpam	Butterfly pea	Leaf	Shrub	Leaf paste applied topically over affected area to cure wounds.
<i>Coccinia grandis</i> (L.) Voigt.	Cucurbitaceae	Kovaikkai	Ivy-Gourd	Fruit	Climber	Raw fruits taken orally are used to cure stomach ulcer.
<i>Cocos nucifera</i> L.	Arecaceae	Thengu	Coconut	Whole plant	Tree	Coconut milk is used to cure administrated for 30 days jaundice, chickenpox.
<i>Colocasia esculenta</i> (L.) Schott.	Arecaceae	Chembukilangu	Taro, Elephant ear	Rhizome	Herb	Daily intake of cooked rhizome cures piles.
<i>Coriandrum sativum</i> L.	Apiaceae	Kothamalli	Coriander	Leaf	Herb	Leaves are used to cure jaundice and vomiting.
<i>Crataeva magna</i> (L.) DC.	Capparidaceae	Mavilingam	Three-lived caper	Root and Bark	Tree	Root and bark are used to treat skin inflammation.
<i>Crotalaria retusa</i> L.	Fabaceae	Killukilluppai	Devil bean	Leaf	Shrub	Leaf paste applied topically cures skin diseases.
<i>Cucumis sativus</i> L.	Cucurbitaceae	Vellerikkai	Cucumber	Fruit Seed	Climber	Fruits used as edible and powdered seeds are applied on infected area to cure burning sensation.
<i>Cucurbita maxima</i> Duchesne.	Cucurbitaceae	Pusanikai	Squash winter	Fruit	Climber	Fruits are edible and acts as coolant.
<i>Curcuma longa</i> L.	Zingiberaceae	Manjal	Turmeric	Rhizome	Herb	Rhizome paste applied topically cures skin infection.
<i>Cynbopogon citratus</i> (DC.) Stapf.	Poaceae	Vasanaipullu	Lemon grass	Leaf	Herb	Juice of wholeplant is drunk to cure head ache and





Jayakumar et al.,

Botanical name	Family	Local name	Common name	Useful parts	Habit	Medicinal uses/ Mode of usage
						rheumatism.
<i>Cynodon dactylon</i> (L.) Pers.	Poaceae	Arukampullu	Bermuda grass	Leaf	Herb	Leaf juice taken orally to controls blood sugar level.
<i>Datura innoxia</i> Mill.	Solanaceae	Umathai	Devil's trumpet	Flower	Herb	Dried flowers are burnt and smoked to cure asthma.
<i>Dendrocalamus strictus</i> (Roxb.) Cor	Poaceae	Kalmungil	Bamboo	Leaf	Herb	Leaf juice taken for three days cures cough in children.
<i>Eclipta prostrata</i> (L.) Mant.	Asteraceae	Karisalangani	Trailing eclipta	Root	Herb	Root paste is applied to heal wounds.
<i>Erythrina variegata</i> L.	Fabaceae	Mullu murungai	Indian coral tree	Leaf	Tree	Leaves are used to cure leprosy.
<i>Euphorbia heterophylla</i> L.	Euphorbiaceae	Palperuki	Mole plant	Leaf	Herb	Cooked leaves taken orally cures diarrhoea.
<i>Euphorbia hirta</i> L.	Euphorbiaceae	amanpacharsi	Snake weed	Herb	Herb	Herb extract used as a medicine for cold and cough.
<i>Evolvulus alsinoides</i> L.	Convolvulaceae	Vishnukranthi	Slender dwarf morning glory	Leaf	Herb	Leaf paste applied over head before bathing promote growth of hair.
<i>Ficus benghalensis</i> L.	Moraceae	Alamaram	Baniyan tree	Root	Tree	Root boiled with coconut oil applied over head before bath used to cure dandruff and heals cracks on the foot.
<i>Ficus racemosa</i> L.	Moraceae	Athimaram	Athi tree	Leaf	Tree	Leaf juice given orally three times per day for three days cures brain fever.
<i>Ficus religiosa</i> L.	Moraceae	Arasu	Peepal tree	Bark	Tree	Bark paste applied topically is used to cure rheumatism.
<i>Gomphrena globosa</i> L.	Amaranthaceae	Vadammali	Globe amaranthus	Root	Herb	Root extract are used to cure cough.
<i>Helianthus annuus</i> L.	Asteraceae	suryakanthi	Sun flower	Seeds	Shrub	Seed powdered and taken orally reduce cholesterol and cure diabetics.
<i>Heliotropium indicum</i> L.	Boraginaceae	Thelkodikai	Indian turn sole	Leaf	Herb	Leaf paste used to cure ring worm infection.
<i>Hibiscus rosa-sinensis</i> L.	Malvaceae	Chembaruthi	Shoe flower	Leaf & flowers	Shrub	Leaf and flower boiled along with the coconut oil applied over head before bath enhance hair growth.
<i>Ipomoea quamoclit</i> L.	Convolvulaceae	Mayilmanikam	Cypress vine	Leaf	Climber	Leaf paste applied topically cures elephantsis diseases.
<i>Ixora coccinea</i> L.	Rubiaceae	Thettichedi	Sacred ixora	Leaf	Shrub	Leaf paste are used to cure skin infection and itching diseases.
<i>Jasminum angustifolium</i> (L.) Willd.	Oleaceae	kattupichi	Wild jasmine	Leaf	Shrub	Leaf paste applied topically cures skin diseases.
<i>Jasminum sambac</i> (L.) Aiton.	Oleaceae	Malligai	Jasmine	Flower	Shrub	Flower powder used to cure skin diseases.





Jayakumar et al.,

Botanical name	Family	Local name	Common name	Useful parts	Habit	Medicinal uses/ Mode of usage
<i>Jatropha curcas</i> L.	Euphorbiaceae	Katamanaku	purging nut	Leaf	Shrub	Pasted leaves used to cure skin infection and eczema.
<i>Jatropha glandulifera</i> Roxb.	Euphorbiaceae	Adathalai	Glandular jatropa	Seed and root	Shrub	Seed oil applied topically cures rheumatism and root decoction used to cure abdominal pain.
<i>Justicia adhatoda</i> L..	Acanthaceae	Adhatoda	Malabar nut	Leaf	Shrub	Leaf juice taken orally cures cough and heals bronchitis problem.
<i>Lantana camara</i> L.	Verbanaceae	Unnichi	Lantana weed	Leaf and Root	Shrub	Leaf paste used to cure ulcer and root decoction cures cough and cold.
<i>Lawsonia inermis</i> L.	Lythraceae	Maruthani	Henna	Leaf	Shrub	Leaf juice is used as cooling agent and its promote hair growth.
<i>Leucas aspera</i> (Willd.) Link.	Lamiaceae	Thumbai	Thumbai	Leaf	Herb	Leaf paste applied topically on forehead to cure head ache.
<i>Limonia acidissima</i> Groff.	Rutaceae	Vilankai	Wood apple	Fruit	Tree	Fruit pulp mixed with honey taken orally are used against heart diseases.
<i>Luffa acutangula</i> (L.) Roxb.	Cucurbitaceae	Peerkkangai	Ridged gourd	Fruit	creeper	Fruits are eaten to cure skin diseases.
<i>Lycopersicon esculentum</i> Mill.	Solanaceae	Thakkali	Tomato	Fruit	Herb	Intake of fruits effective in reducing cholesterol levels and lowering blood pressure.
<i>Madhuca longifolia</i> (J.Koenig) J.f.	Sapotaceae	Illupai	Indian butter tree	Root	Tree	Boil the root along with coconut oil applied topically in legs used to cure rheumatism
<i>Mangifera indica</i> L.	Anacardiaceae	Mangai	Mango tree	Flower	Tree	Flower decoction taken orally cures chronic dysentery.
<i>Manihot esculenta</i> Crantz.	Euphorbiaceae	Marchinikilangu	Tapioca	Tuber	Shrub	Cooked tubers are rich in starch.
<i>Manilkara zapota</i> (L.) P.Royen	Sapotaceae	Sapota	Sapota tree	Fruit	Shrub	Root powder is taken orally for three days to cure cough.
<i>Marsilea quadrifolia</i> L.	Verbenaceae	Aarakeerai	Frog fruit	Leaf	Shrub	Paste of leaf juice are applied over head to cure dandruff problem.
<i>Mentha arvensis</i> L.	Lamiaceae	Puthina	Mint	Leaf	Herb	Leaf decoction given orally cures diarrhoea.
<i>Mimosa pudica</i> L.	Mimosaceae	Thottal churungi	Touch- me- not	Leaf	Herb	Pasted leaves applied for cuts and wounds.
<i>Mirabilis jalapa</i> L.	Nyctaginaceae	Anthimantharai	Four'o clock	Root	Herb	Pasted roots applied topically twice a day to cure sebaceous cysts.
<i>Momordica charantia</i> L.	Cucurbitaceae	Pavaikkai	Bitter gourd	Fruit	Herb	Fruits taken orally controls blood sugar level.
<i>Morinda pubescens</i> Sm.	Rubiaceae	Manjanathi	Morinda tree nuna	Leaf	Tree	Juice of leaves are used to cure diarrhoea, dysentery and fever.





Jayakumar et al.,

Botanical name	Family	Local name	Common name	Useful parts	Habit	Medicinal uses/ Mode of usage
<i>Moringa oleifera</i> Lam.	Moringaceae	Murungai	Drumstick tree	Leaf	Tree	Leaf extract cures stomach ache and constipation.
<i>Mukia maderaspatana</i> (L.) M. Roem.	Cucurbitaceae	Musumusukai	Madras pea pumpkin	Leaf	Climber	Roasted leaves are cures respiratory problems.
<i>Murraya koenigii</i> (L.) Spreng.	Rutaceae	Kariveppilai	Curry leaf	Leaf	Herb	Leaves boiled with coconut oil applied on the hair to promote hair growth.
<i>Musa sapidisiaca</i> L.	Musaceae	Vazhai	Banana	Fruit, flowers and pseudostem	Tall herb	Half cup of Pseudostem juice taken orally for a week used to cure kidney stone. Intake of ripe banana used to reduce constipation. Flowers used to control blood sugar level.
<i>Nelumbiumnucifera</i> Willd.	Nymphaeaceae	Thammarai	Lotus flower	Flower	Herb	Flower juice used to cure rheumatism and regulate the blood circulation.
<i>Nerium oleander</i> L.	Apocyanaceae	Arali	Indian-oleander	Flower	Shrub	Flower paste applied topically are used to heal foot cracks.
<i>Nyctanthes arbor-tristis</i> L.	Oleaceae	Pavalamalli	Night jasmine	Leaves	Shrub	Leaf juice are used to cure rheumatism and fever.
<i>Ocimum basilicum</i> L.	Lamiaceae	Thiruneetru pachalai	Sweet basil	Leaf	Herb	Powdered leaves taken orally once a day to cure giddiness.
<i>Ocimum tenuiflorum</i> L.	Lamiaceae	Thulasi	Holy basil	Leaves	Herb	Leaf decoction is taken twice a day to cure cough and cold.
<i>Opuntia stricta</i> (Haw.) Haw.	Cactaceae	Sapathikalli	Prickly pear	Fruit	Shrub	Fruits are edible. It acts as a coolant, diuretic and laxative.
<i>Oryza sativa</i> L.	Poaceae	Nellu	Rice	Grains	Herb	Rice powder is applied to cure inflamed surface.
<i>Pandanus fascicularis</i> Lam.	Pandanaceae	Thalampoo	Screw pine	Root	Shrub	Root paste is applied daily on legs to cure rheumatism.
<i>Pergularia daemia</i> (Forssk.) Chiov.	Asclepiadaceae	Veliparuthi	Pergularia	Leaf	Herb	Decoction of leaves taken orally once a day to cure asthma.
<i>Phoenix sylvestris</i> Roxb.	Areaceae	Ichanmaram	Wild date palm	Leaf	Palm	Crushed fresh leaves are soaked in water overnight, the water is taken next morning in empty stomach to expel worms, fruits act as nerve tonic
<i>Phyla nodiflora</i> L.	Verbenaceae	Poduthalai	Turkey tangle fog fruit	Leaf	Herb	Paste of leaf is applied on head before bath to cure dandruff problem.
<i>Phyllanthus acidus</i> (L.) Skeels	Euphorbiaceae	Ari nelli	Carry me seed	Root	Herb	Root extract is drunk once a day in empty stomach to cure jaundice.
<i>Phyllanthus amarus</i> Schumacher & Thonn.	Euphorbiaceae	Keelanelli	Keelanelli	Whole plant	Herb	Plant juice given orally once a day for 21 days cures jaundice.





Jayakumar et al.,

Botanical name	Family	Local name	Common name	Useful parts	Habit	Medicinal uses/ Mode of usage
<i>Phyllanthus emblica</i> L.	Euphorbiaceae	Nellikai	Goose berry	Fruits	Tree	Boil the fruits along with coconut oil applied externally cures scabies.
<i>Piper betle</i> L.	Piperaceae	Vetrillai	Betal pepper	Leaf	Creeper	Leaf juice used to cure cough, cold.
<i>Pithecellobium dulce</i> (Roxb.) Benth	Mimosaceae	Kodukkapuli	Madras thorn	Leaf,	Tree	Leaf extract taken twice a day are used to cure diarrhoea and dysentery.
<i>Plectranthus amboinicus</i> (Lour.) Spreng	Lamiaceae	Karpuravalli	Indian borage	Leaf	Herb	Leaf juice mixed with jiggery taken orally for once in three days used to cure cough.
<i>Polyalthia longifolia</i> (Sonn).Th waites	Annonaceae	Nettilingam	False asoka	Bark	Tree	Bark paste applied on the infected part to cure skin diseases.
<i>Polygala arvensis</i> Willd.	Polygalaceae	Sirianangai	Snake root	Leaf	Herb	Leaves extract is used to cure skin diseases.
<i>Pongamia pinnata</i> Pierre.	Fabaceae	Punka maram	Indian beech	Bark	Tree	Bark paste is applied externally to heal ring worm infection.
<i>Psidium guajava</i> L.	Myrtaceae	Koyya	Guava tree	Leaf	Tree	Leaf juice used to cure diarrhoea and diabetics.
<i>Punica granatum</i> L.	Punicaceae	Mathulai	Pomegranate	Leaf, flower and fruit	Shrub	Decoction of leaf, flower and fruits are drunk orally used to cure stomach and dysentery.
<i>Raphanus sativus</i> L.	Brassicaceae	Mullanki	Radish	Tuber	Herb	Cooked tuber are edible and are used to cure cough and paralysis.
<i>Ricinus communis</i> L.	Euphorbiaceae	Amanaku	Castor seed	Leaf	Tree	Leaf paste applied externally used to cure leg pain, cracks and leaf juice taken once a day cures constipation.
<i>Rosa indica</i> L.	Rosaceae	Rose	Rose	Flower	Shrub	Flowers soaked with honey for 2 weeks. Infusion drunk increases iron content in our body.
<i>Sesbania grandiflora</i> (L.) Poir.	Fabaceae	Akathikeerai	Sesban	Flowers	Tree	Flowers cooked and taken orally to treat headache.
<i>Sida rhombifolia</i> L.	Malvaceae	Kurunthottiver	Flannel weed	Root and Leaf	Shrub	Root extract taken orally used to cure gas troubles and leaf paste applied externally to cure headache.
<i>Solanum melongena</i> L.	Solanaceae	Kaththiri	Brinjal	Fruit	Herb	Fruit extract reduces upper gastrointestinal inflammation such as gastritis, eosinophilic gastroenteritis, peptic ulcer disease,
<i>Solanum nigrum</i> L.	Solanaceae	Manathakali	Black	Leaf	Herb	Leaf decoction taken orally for a week to cure ulcer.





Jayakumar et al.,

Botanical name	Family	Local name	Common name	Useful parts	Habit	Medicinal uses/ Mode of usage
<i>Solanum surattense</i> Burm.f.	Solanaceae	Kandankathri	Yellow-berried-night shade	Roots Fruits	Shrub	Fruits and roots infusion taken orally twice a day used to cure stomach ache and fever.
<i>Solanum torvum</i> Sw.	Solanaceae	Sundakkai	Thorn apple	Root and Fruits	Shrub	Infusion of root is useful for skin diseases, Fruits sauted with gingelly oil taken orally to cure piles
<i>Solanum trilobatum</i> L.	Solanaceae	Thuthuvalai	Purple fruited pea egg plant	Leaf	Shrub	Decoction of leaves taken with jaggery to get from cough and cold.
<i>Stachytarpheta indica</i> (L.) Vahl.	Verbenaceae	Seemai naiyurvi	Pink rat tail	Root	Shrub	Infusion of root bark is taken twice a day for 3 days to cure diarrhoea and dysentery.
<i>Syzygium cumini</i> (L.) Skeels.	Myrtaceae	Naval	Jambolan, javaplum	Seeds	Tree	Seed powder mixes with milk taken twice a day orally to treat Diabetes
<i>Tabernaemontana divaricata</i> (L.) R. Br. ex Roem. & Schult.	Apocyanaceae	Nanthiavatam	East Indian rose bay wax flower plant	Flower Fruit	Shrub	Flower and fruit extract applied topically to cure tooth ache.
<i>Tamarindus indica</i> L.	Caesalpiniaceae	Puliamaram	Tamarind	Leaf	Tree	Leaf paste used to cure swelling in the body and legs.
<i>Tectona grandis</i> L.f.	Verbenaceae	Thekku	Teak	Leaf, Bark	Tree	Leaf Oil used as a hair tonic and it promote hair growth, bark astringent used in bronchitis.
<i>Tephrosia purpurea</i> (L.) Pers.	Fabaceae	Kozhunji	Purple tephorsia	Root	Herb	Decoction of root is to cure urinary disorders.
<i>Terminalia catappa</i> L.	Combretaceae	Vallankotai	Indian almond	Seeds	Tree	Powdered seed used to cure cough, ulcer and skin rashes.
<i>Thespesia populnea</i> (L.) Sol. ex Correa	Malvaceae	Poovarasu	Willd indigo	Bark	Tree	Bark paste applied externally which heals leprosy and scabies.
<i>Thevetianeriifolia</i> Juss. ex Steud.	Apocyanaceae	Manjalarali	Yellow oleander	Root	Shrub	Root paste is applied topically to cure boils.
<i>Tinospora cordifolia</i> (Willd.) Miers ex Hook. f. & Thomson.	Menispermaceae	Seenthilkodi	Tinospora, heavenly elixir	Leaf	Climber	Leaf extract is drunk orally to cure jaundice.
<i>Tribulus terrestris</i> L.	Zygophyllaceae	Nerungil	Land-caltrops	Leaf	Herb	Leaf paste is taken orally to cure stomach- ache.
<i>Trichosanthes cucumerina</i> L.	Cucurbitaceae	Pudalangai	Snake gourd	Fruit	Cimber	Dried fruit powder decoction are given orally with sugar to assist digestion.
<i>Tridax procumbens</i> L.	Asteraceae	Muriyanpachalai	Tridax daisy	Leaf	Herb	Leaf juice is applied over affected place to cure cuts .
<i>Tylophora zeylanica</i> Decne.	Asclepiadaceae	Palaikeerai	Indian Ipecac	Leaf	Climber	Powdered leaves are used to heal respiratory problem.
<i>Vigna mungo</i> (L.) Hepper.	Fabaceae	Ulundhu	Black gram	Seed	Twiner	Seeds are used as a protein food supplement.





Jayakumar et al.,

Botanical name	Family	Local name	Common name	Useful parts	Habit	Medicinal uses/ Mode of usage
<i>Vitex negundo</i> L.	Verbenaceae	Nochi	Chaste tree	Leaf	Shrub	Leaf paste applied over affected places to cure cuts.
<i>Zingiber officinale</i> Rosc.	Zingiberaceae	Inchi	Ginger	Rhizome	Herb	Rhizome juice is used to cure indigestion and gas troubles.
<i>Ziziphus mauritiana</i> Lam.	Rhamnaceae	Illanthai	Jackal jube	Fruit Bark	Tree	Fruits are edible and bark decoction taken once in three day is used to cure uterus disorders.

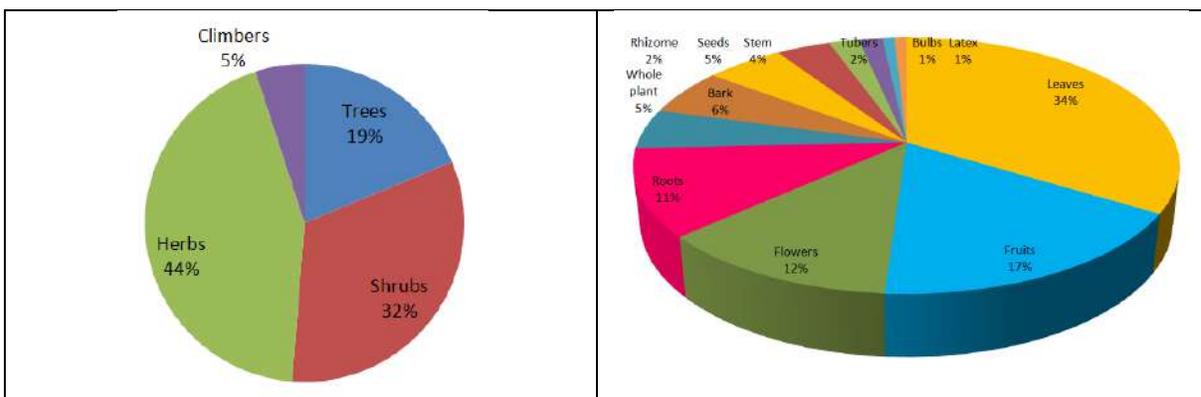


Figure 1. Habit wise distribution of ethnomedicinal plants

Figure 2. Plant parts used for the preparation of herbal medicines by Vetans

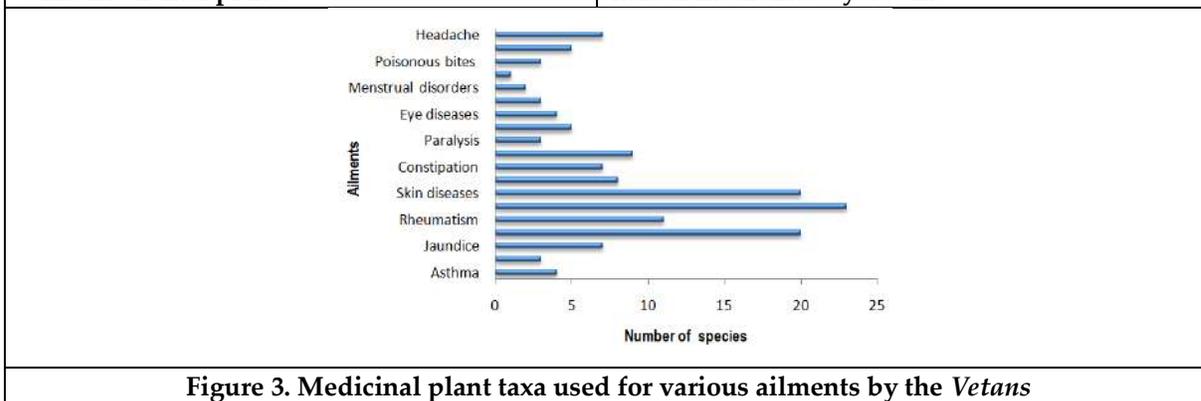


Figure 3. Medicinal plant taxa used for various ailments by the Vetans

