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ResearchArticle

Medicinal Plants Diversity in Muthathi Wild Life Sanctuary, Karnataka, India

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Abstract

Muthathi is a dense and dry deciduous forest, which is the home of Cauvery Wild Life Sanctuary. In this study the outcome documentation of medicinal plants and its diversity uses in Muthathi Wild Life Sanctuary (MWLS) and inclusive forest is reported. Conventional medicines or traditional medicines are very important part of an Indian culture. Information related to different plants which are used by confined community in the treatment of many common diseases in the area was collected. Records on the use of medicinal plants are collected using structured interview of about local healers and thorough observations and conversations with local communities. The most frequent ailments described are anti-cancer, anti-diabetes, anti-inflammatory, peptic ulcer, jaundice, skin and urinary problems. This study presents new research determinations and perceptions on the search for new drugs based on local uses of medicinal plants.

Introduction

Medicinal plants have served as the main source of medicine in India[1]. Medicinal plants are used for preventive, promotive and curative purposes. Medicinal plants have been preliminary selected on the basis of local traditional knowledge[2].Medicinal plants have their ideals in the elements present in various plant tissues. These produce specific physiological action in the human body.Medicinal plants have lot of antimicrobial properties and it acts as a therapeutic agent against plants and human pathogens. It has a broad application in the treatment and therapy of various diseases.

Plants are always considered as a primary source of drugs in traditional and conventional system of medicines. About 80% people of the world, particularly in the rural areas of developing countries, continue using traditional resources in healthcare [3]. Indian subcontinent is renowned for its cultural and plant biodiversity where large numbers of people are still living in tribes. These tribal people retain a pool of unrevealed ethno medicinal and ethno pharmacological information concerning the flora of their surroundings, which may prove to be very helpful in rural community with its advantage. Natural wealth as well as the undisclosed ethno pharmacological information and the tribal cultures have been decreased remarkably at a disturbing rate due to change in life style, unintentional developmental programs and mounting recent civilization. Negligence by the youth also influences the traditional knowledge[4].Therefore, it is necessary to discover and document this exceptional, original, and conventional information of the ethnic population, before it disappears with the knowledgeable persons. It is also for the establishment of these conventional principles at the national and international level recognising the recent global trends[5]. There is inadequate data on ethno medicinal uses of plant in Muthathi Wild Life Sanctuary. Some of the reported surveys are available for potential effectiveness of the traditional healthcare practices.Present study focus towards the availability and uses of medicinal plants in MWLS along with the changes in medicinal plants diversity and community level in the view of medicinal practitioners.

Materials and methods

Study area

The study area, Muthathi Wild Life Sanctuary is lies in the elevation range of 125-1514 metres (410-4967ft) in Western Ghats of Karnataka. It is located north latitudinal range 11^0 56'49" to 12^0 21'26"and between east longitude $77^0$15" to $77^0$46'55". It's Eastern and north-eastern borders are bounded by the Tamil Nadu state. The extreme climatic condition is characteristic of the forest is 1027 sq kms (396.73 sq mi). The mean minimum temperature vary between 5^0-20^0C and maximum temperature between 24^0-41^0C. The sanctuary receives rainfall both during the Northeast monsoon and

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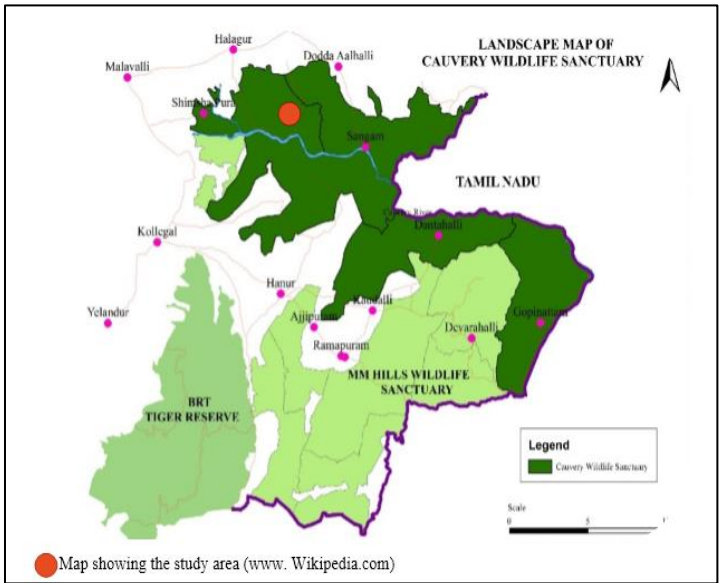
Southwest monsoon. Human habitation inside the sanctuary and within 5kms radius of the sanctuary consists of eight enclosed villages and 30 villages respectively with a total population of 39,000 whose main occupation in agriculture.

Muthathi is a dense and dry deciduous forest, which is the home of Cauvery Wild Life Sanctuary. It is a hilly place covered with forest and it is situated on the banks of river Cauvery near Malavalli Taluk, Mandya Dist. This Cauvery Wild Life Sanctuary is established in 14 Jan 1987 with surrounding 50,000 hectares.This forest is protected under the Wild Life Protection act of 1973. It has divided into four ranges like Kanakapura Wild Life Range, Hanur Wild Life Range, Kowdally Wild Life Range and MM Hills Wild Life Range and Gopinathan Wild Life Sanctuary. It is recognised as Sangama Wild Life Range in 13 April 2013 with surroundings 1, 00,000 hectares like 1027sq kms. This forest has 75% to 80% flora; there are some medicinal plants which have not been found studied in all part of this forest.Muthathi Wildlife Sanctuary previously has rich forest wealth and traditional knowledge, people from nearby utilized the forest for their livelihood as well as medicinal requirements. These people explore the medicinal prosperity of the area.

The common medicinal plants available in Muthathi Wild Life Sanctuary are *Azadirachataindica*A Juss, *Basellaalba*L, *Cassia auriculata*L, *Centella asiatica (*L*),* *Emblica officinalis(*L*),* *Leucus aspera, Morindacitrifolia (*L*),* *Plectranthus ambionicus*Spreng, *Sesbania grandiflora* L, *Termanaliaarjuna*Q&A,*Tinosporacardifolia (*Thumb*),* *Vitex negundo*L*and Withaniasomnifera(*L*)*Dunal.(Management of Cauvery Wild Life Sanctuary, Wild Life Protection Act 1973(Central Act No. 53 of 1972) vide Government Notification).

During the study of traditional medicine of MWLS among the people is collected through according to interviews followed by the questionnaire[6].The traditional peoples of all the age groups were interrogated and their knowledge about the medicinal plants was documented. The people are first investigated whether they give the traditional medicine to common disorders like cold, cough, dysentery fever, stomach-ache, headache etc., were collected. According to their beliefs, if the name of the plant is disclosed means plant loses its healing property. In such cases they were convinced by the significance of the study and the importance of the documentation of traditional knowledge, then only they interacted and told what they known about the herbal medicine. Medicinal plants which are collected during the study are identified with the help of floras[7]and other medicinal plants reference books. Therefore, the present study is proposed to document the area. According to the reports and available literature not much work has been carried out on medicinalplants.



Result and discussions

In the present study investigationof the plant diversity and traditional medicinal plants uses was collected.To investigate the ethno botanical uses of Muthathi Wild Life Sanctuary, visit to the study area conversation with the traditional practioners and data was collected.

In the family level Fabaceae is the largest family with 8 species, followed by in Lamiaceae 7 species, in Rubaceae 5 species, in Solanaceae 4 species and in Amaranthaceae 3 species, in Caeselpinaceae 3 species, in Moraceae 3 species andin Acanthaceae 2 species similarly other families are distributed each 2 or 1 species respectively. In the life form analysis 25 species of trees, 21 species of herbs, 17 species of shrubs, and 10 species of climbers were collected during the field study and identified. In addition according to the systematic classification the taxonomic order also evaluated in which 73 species, belong to 39 families were recorded in the study (Tab. 1).

The traditional medicinal plants used in the treatment of various ailments like fever, cough, headache, diabetes, ulcer,

hepatitis, jaundice, anaemia, wound, sinus, asthma, piles, bleeding, haemorrhage, burns, injuries, tuberculosis, urinary tract infection, small pox, chicken pox, high blood pressure, herpes, leukaemia, diarrhoea, skin disease, nerve disorders, leprosy, hypertension, nausea, menstrual disorders, abdominal pain, malaria, eye disease, arthritis, cancer, gonorrhoea, myocardial infraction, coronary artery diseases, atherosclerosis, bronchitis, bone fracture and cancer etc.,

The leaves, roots, seeds, fruits, barks and stems are exhibiting main contribution towards the treatment of different diseases. Few medicinal plants uses are reported in the earlier articles such as *Cassia auriculata* Linn young leaves are used to keep the body cool, *Vitex negundo* Linn leaves are used for the treatment of Night blindness (Prashanthkumar P & Vidyasagar G. M., 2006). *Tylophora indica* (Burn.f) fresh leaves are taken orally to cure asthma, *Annona squmosa* (L) unripened fruit are used for the treatment of intestinal infections [7]

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The traditional medicinal plants used in the treatment of various ailments like fever, cough, headache, diabetes, ulcer, hepatitis, jaundice, anaemia, wound, sinus, asthma, piles, bleeding, haemorrhage, burns, injuries, tuberculosis, urinary tract infection, small pox, chicken pox, high blood pressure, herpes, leukaemia, diarrhoea, skin disease, nerve disorders, leprosy, hypertension, nausea, menstrual disorders, abdominal pain, malaria, eye disease, arthritis, cancer, gonorrhoea, myocardial infraction, coronary artery diseases, atherosclerosis, bronchitis, bone fracture and cancer etc.[8]

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Table 1: Traditional Medicinal Plants and their uses

Plants Name/ Family	Local name	Habitat	Part used	Mode of use	Medicinal Uses
Acacia catechu WILD Fabaceae	Kaggali	Tree	Leaves, bark, gum	Leaf extracts was employing over a body skin	Skin diseases, fever, herpes, musculoskeletal disorders, dental diseases,
Achyranthes aspera L Amaranthaceae	Uttarani	Herb	Whole plant	Leaf powder is mixed with jiggery and applied over corn part	Asthma, itching, hysteria, skin diseases, ulcer, cancer, stone in bladder
Aegle marmelos. L. Corr Rutaceae	Belwapatre	Tree	Leaves, fruit	Fruits can be eaten orally and pulp powder is juice is strained and sweetened to make drink	Gastrointestinal disorders, skin diseases, cardiovascular system, constipation, menstrual irregularities
Alangiumsalvifolium (L.F) WANG Alangiaceae	Ankola	Tree	Leaves, fruit, root	Leaves decoction taken orally	Urinary tract infections, sinus, wounds, snake bite
Aloe vera (L) Burm.f Aloeceae	Lokasara	Herb	Leaves, pulp	Gel and juice are employing skin, face	Protecting the skin, burns, sunburn, acne, abdominal tumours
Alternanthera sessilis (L) R, Br Amaranthaceae	Honagone	Herb	Whole plant	Leaves are used as an ingredient to making medicinal hair oils and cosmetics	Acne, asthma, bronchitis
Amaranthus dubius Mart Amaranthaceae	Dantu	Herb	Leaves, flower, stem	Leaves are boiled in salt water and eaten orally	Haemorrhage, kidney problem, anaemia, constipation
Andrographis	Nelabevu	Herb	Leaves,	Leaf extract are used in	Malaria, diarrhoea,

paniculata (Burm.f) Wall Acanthaceae			stem	manufacturing of medicine	dysentery, burns, cancer, diabetes, ulcer, leprosy
Annona squamosal L Annonaceae	Seethapal	Tree	Fruit, leaves	Crush the seed in water and apply over swelling part	Bulge
Argemone Mexicana L Papavaraceae	Datturigida	Shrub	Root	Root powder is taken as anthelminthic. Stem latex is applied over effected skin blisters and oral ulcers	Oral ulcers
Azadirachta indica A Juss Meliaceae	Bevinamara	Tree	Leaves, bark	Leaves taken orally and making use in tooth paste	Skin problem, dental treatment
Basella alba L Basellaceae	Baselesoppu	Climber	Leaves, stem	Leaves boiled in salt water and taken orally	Blood cancer, bruises, burns, anticancer, antiviral
Calotropis gigantean L Asclepiadaceae	Ekkadagida	Shrub	Leaves, roots, latex	Bud, clustered apple bud, paan leaf mix, with lime and employing for treatment of lump	Piles, spleen, disorders, antidote for snake poison, cough, skin diseases, diarrhoea, haemorrhage, respiratory problem
Cassia auriculata L Caesalpinaceae	Avarike	Shrub	Leaves, flower, root, seed	Dried flowers, seeds and leaves extract are used in clinical aspects	Diabetes, fever, urinary diseases conjunctivitis, rheumatism
Cassia fistula L Caesalpinaceae	Kakke	Tree	Leaves, bark	Flowers and leaves are eaten by people	Burns, skin problem
Cassia tora L Caesalpinaceae	Chagathegida	Herb	Leaves, seeds	Seeds and leaves extract used in making different medicines	Burns, cuts, wounds, skin problem
Chlorophytum laxum R.Br Liliaceae	Bicheti grass	Herb	Leaves, herb	Tubers are used extract and employing for piles and as well as astringent	Piles, diarrhoea, dysentery
Centella asiatica (L) Urban Apiaceae	Ondelaga	Herb	Whole plant	Leaves, stems is used in a salad made also with onions, crushed peanuts,, bean powder, and with lime juice and fish sause fruits and leaves drinking with herbal tea	Vitamin B, purifies blood, epilepsy, hysteria, agitation, insomnia, urinary tract, infection, asthma
Cissusquadrangularis Vitaceae	Managaravalli / Narale	Climber/creeper	Leaves, pulp	Leaves and pulps are taken orally	Bone fracture, joint pain, periodontal diseases, haemorrhage, diabetes
Citrus medica L Rutaceae	Madala	Small tree	Leaves, seeds, pulp, fruit	Fruits are eaten orally	Abdominal colic, digestive problem, piles
Coccinia grandis (L.) VOIGT Cucurbitaceae	Thonde	Climber	Leaves, stems	Young leaves and long slender stem tops cooked and eaten or added to soup, young and tender green fruits added to salad and curries, juice of the root and leaves drink	Treatment of diabetes, headache, skin eruptions, chest cold, gonorrhoea, rheumatism
Cucumis sativus L Cucurbitaceae	Southekayiballi	Climber	Leaves	Leaves and fruits are taken orally	Scorpion bite

Curcuma longa Zingiberaceae	Arisina	Herb	Roots, rhizome	Leaf is used to prepare special sweet dishes and powder is used colouring and flouring in cook	Chronic wounds, skin problem, burns, cuts, arthritis, inflammation, injuries, cholesterol
Cynodon dactylon (L.) Pers.-Bermudagrass Poaceae	Garike	Herb	Leaves, rhizome, whole plant	Leaf extract employing on wounds	Bleeding, piles, skin diseases, wounds, scabies, ring worm, vomiting diarrhoea, leucoderma, allergy, anaemia
Elaeocarpusganitrus Roxb Elaeocarpaceae	Rudraksha	Tree	Leaves, fruit, bark	Leaf extract are used for preparation of medicines, seeds employing the body	Nervous system, high blood pressure, tuberculosis, small pox, chicken pox
Emblica officinalis L Euphorbiaceae	Bettadanellikayi	Tree	Leaves, fruit, seeds, roots, bark, flower	Leaf powder and dried fruit was consumed with water	Alopecia, hair treatment, digestive system
Entedascandens Benth. Leguminosae	Haleballi	Climber	Leaves	Young leaves are eaten as vegetable	Jaundice, diabetes, cough, fever
Epiphyllumoxypetalum (DC) Haworth Cactaceae	Brahma kamala	Shrub	Flower, stem	The juice is used drink, a soup prepared with excellent tonic	Tuberculosis, urinary tract infection, haemorrhage, cough, fever
Ficus racemosa L Moraceae	Attimara	Tree	Leaves, fruit, root, bark, latex	Fruits are eaten	Leucorrhoea, anaemia, burns, fatigue, leprosy, urinary discharges
Ficus religiosa L Moraceae	Aralimara	Tree	Bark	Bark, root, leaf, fruits, latex used as astringent	Fever, herpes, wounds, bone fracture, skin problem, diarrhoea
Ficus Benghalensis L Moraceae	Aaladamara	Tree	Bark, aerial root, tender leaf	The milky latex is smeared topically to treat toothache, bruises, painful areas, bark is tonic and diuretic	Fever, fracture, skin diseases, wounds, sinus, diarrhoea
Gymnema sylvestre R.Br Apocynaceae	Madunasini	Climber	Leaves, seeds, roots	Leaves are taken orally	Diabetes, weight loss, stimulating digestive system, diuretic
Justicia adhathoda L. Acanthacaeae	Adusoge	Shrub	Leaves	Young tender shoots are boiled and eaten with salt	Used in siddha medicine, Ayurveda Homeopathy and urinary system of medicine
Leucus aspera Lamiaceae	Tumbe	Shrub	Leaves	Leaves cooked and eaten as a pot herb	Musculoskeletal disorders, wound, sinus, urinary diseases, skin diseases, anaemia, jaundice, diabetes
Madhuca longifolia J.F.Macbr Sapotaceae	Hippe	Tree	Leaves	Both ripe and unripened fruit can be eaten, fragnant fleshy flower can eaten raw or cooked used as a sweetener, tonic, demulcent	Skin diseases, nerve disorders, cough, burning sensation
Magnolia champaka (L) Baill	Sampige	Tree	Leaves, flower,	Fruit is edible, bark is used for adulteration	Leprosy, colic, badly chipped skin

Magnoliaceae			stem		
Magnifera indica L Anacardiaceae	Mavu	Tree	Fruit, leaves	Seed extracted paste was employing on skin, fruit eaten orally	Swelling
Manihot esculenta Crantz Euphorbiaceae	Maragenasu	Shrub	Tubers	Tubers are boiled in water and eaten orally	Hypertension, head ache
Mentha arvensis L Lamiaceae	Pudina	Shrub	Leaves, seeds	Leaf juice along with equal part of lime juice taken orally	Cold, cough, fever, vomiting
Mimosa pudica L Mimosaceae	Muttidare muni	Shrub	Whole plant	Roots and leaves paste is applied on wounds	Wounds, urinary tract infection, piles, sinus, asthma, leucoderma
Moringa oleifera Lam Moringaceae	Nuggemara	Tree	Leaves, fruit, flower, roots	Leaves are boiled in salt water and taken orally	Worms in stomach, iron deficiency, diarrhoea
Murrayakoenigii L Rutaceae	Karibevu	Small tree	Leaves, bark, root	Plants are eaten orally by cook	High growth digestion problem, sickness, nausea
Morindacitrifolia L. Rubiaceae	Noni	Shrub	Leaves	Unripe fruit is used in cooking sambals and curries, seeds are roasted and eaten	Abdominal pain, impotence and menstrual disorders, traditional medicines
Ocimum sanctum L Lamiaceae	Sriramatulsi	Shrub	Leaves	Leaves are cooked used in salad, a refreshing tea can be made from the leaves, seeds are made into a sweet, cooling beverage	Fever, wound, ulcer, epilepsy, digestive problems, skin diseases, cold, cough, antioxidant, nausea, chronic diarrhoea
Ocimum basilicum L Lamiaceae	Kamakasturi	Shrub	Leaves	Leaves and flowers used as flavouring in tomato dishes, pasta sauces, essential oil of plant is used as a flavouring in mustards sauces, vinegars, tea is made from leaves	Cough, cold, bleeding, piles, constipation, migraine, abdominal cramps, skin infections
Ocimum tenuiflorum L Lamiaceae	Krishna tulsi	Shrub	Leaves	Leaves are used as flavouring sweetly spicy, tea, seeds used in sweet	Essential oil, herbal tea, antioxidant, cold, cough, antiseptic, arthritis, digestive disorders rheumatism
Opuntiahumifusa (Raf) Raf Cactaceae	Papaskalli	Shrub	Fruit	Fruits taken orally	Headache
Origonummajorana L. Lamiaceae	Maruga	Herb	Leaves	Oil is rubbed into skin ,grind a leaves into a paste and add hot water or tea	Fever , cold, cough
Piper betle L Piperaceae	Veeleyadele	Climber	Leaves, roots	Mixture of leaves and other ingredients is used as a masticatory, which acts as a gentle stimulant	Calcium deficiency, antiseptic, malaria
Plectranthus amboinicusSpreng	Doddapatre	Herb	Whole plant	Leaves are eaten with bread and butter, or are bruised and put into	Cold, cough, fever, headache

Lamiaceae				country beer	
Pongamiapinnata (L). PIERR Fabaceae	Hongemara	Tree	Leaves, fruit, bark, twigs	Seed oil is used stomachic and cholagogue, seed powder used as expectorant	Wounds, skin diseases, piles, musculoskeletal disorders
Portulaca oleracea L Portulaceae	Doddagonisoppu	Herb	Leaves, stem, flower	Young leaves are addition to salad, soups, sour, flavour. Seeds powder mixes with cereals for use in gruels, bread, pancakes	Piles, wound, abdominal disorders, bronchitis, asthma, eye diseases
Pterocarpusmarsupium ROXB Fabaceae	Honnemara	Tree	Leaves, twigs, gum, latex	Flowers, bark, seeds a astringent, bark either as a powder or decoction	Fever, piles, skin diseases, musculoskeletal disorders, diabetes, chronic diarrhoea toothache
Rauwolfia serpentine L Rutaceae	Sarpagandha	Shrub	Leaves, fruits	Juice or decoction is used to remove opacities of the cornea of the eyes and also to treat wounds and itches	Bite of poisonous snake, hypertension, low blood pressure
Rubiacardifolia L Rubiaceae	Chitravalli	Climber	Leaves, stem, roots, fruits	Leaves cooked is used as vegetable salt eaten orally	Skin diseases, arthritis, uric acid, diarrhoea, dysentery, chronic fever, renal infection, antiseptic diabetes
Rutachalepensis L Rutaceae	Nagadali	Herb	Leaves, flowers	Fruit poultice	Hysterical infections, cough, fever, inflammation
Saraca asoka (Roxb) Willd Fabaceae	Ashokamara	Tree	Leaves, bark	Seed powder cures the kidney stone, flower juice is used orally, barks, seeds, flowers are preparing capsules, tonic and ointments	Cancer, uterus problems, kidney stone, diabetes, cure of piles and bleeding caused due to piles, urine retention, rheumatoid arthritis, joint pain, purification blood, memory enhancer, swelling of the stomach
Sesbania grandiflora L Fabaceae	Agasegida	Tree	Leaves, bark, flower	The protein rich seeds are fermented into tempeh, leaves and shoots cooked and added to salad, clear gum obtained from the bark is used in foods, decoction flowers taken orally	Fever, night blindness, rhinitis, running nose, abdominal pain, liver, spleen disorders, diarrhoea, respiratory tract infection, epilepsy, oral infection, throat infection, rheumatism, sinus congestion, malaria, swellings
Sennaauriculata Fabaceae	Avarike	Small tree	Whole plant	Leaves are employing body with oil on bone fracture	The leaves have laxative property, conjunctivitis, rheumatism, eye diseases, gonorrhoea and gout
Solanum indicum L Solanaceae	Kirigulla	Herb	Root, fruit	Decoction, fruit juice, powder taken orally	Fever, dropsy, skin diseases, piles, eye diseases, chest pain, hard urination, sore throat, asthma, cardiac disorders
Solanum nigrum L Solanaceae	Ganike	Herb	Leaves, roots, berries, stem	Leaves, fruits are eaten orally	Bronchitis, itching, asthma
Solanum	Nelagulla	Herb	Fruit	Fruit taken orally	Bronchitis, asthma, chronic

xanthocarpum Schard & H. Wendl Solanaceae					gastro intestinal problem, cough
Sauropus androgynous (L) Merr Phyllanthaceae	Chakramuni	Herb	Leaves, stem	Leaves extract employing on eye and juice taken orally	Anti-diabetes, cough, anti-inflammatory, lungs problem, fever, eye infections
Syzygiumcumini L Myrtaceae	Jampunerale	Tree	Fruit	Fruits are eaten orally	Diabetes
Tagetes erecta L Asteraceae	Chendhuvu	Herb	Leaf	Wash the ear and apply leaf extract in pus formed region of ear	Ear seepage
Terminalia arjuna Q &A Combretaceae	Matti	Tree	Bark	Bark decoction taken orally	Skin diseases, wounds, tumours, peptic ulcers, wound skin ulcers, chronic low-grade fever, bone fractures, angina pectoris, myocardial infarction, coronary artery disease, heart failure, atherosclerosis
Terminalia chebula Retz Combretaceae	Alalekayi	Tree	Leaves, seeds	Seeds was used made oil and use	Fever, loss of appetite, cough, asthma, obesity, jaundice, digestion problem
Tinosporacardifolia (Thunb) Menispermaceae	Amrithaballi	Climber	Leaves, stem	Leaves and stems juice are taken orally	Diabetes, high cholesterol, allergy, rhinitis, stomach pain, lymphoma, cancer, rheumatoid, arthritis, hepatitis, peptic ulcer, gonorrhoea, fever, bone fracture
Tylophora Indica (BURM.F) Merill Asclepiadaceae	Adumuttadaballi	Climber	Leaves, root	Fresh leaves eaten daily	Asthma, bronchitis
Urariapicta Fabaceae	Murelehonne	Herb	Leaves, flowers	Roots oil extract used for body	Anti-cancer, anti-inflammatory, cardio vascular diseases, bone fracture, neural disorder
Vitex Negundo L Verbenaceae	Lakki	Shrub	Whole plant	Leaves, flowers extract and juice to prepare medicine	Anti-cancer, rheumatism, cough, herbal medicine for women menstrual cycle
WithaniaSomnifera (L) Dunal Solanaceae	Ashwagandha	Shrub	Leaves, roots	Leaves and roots used as a powder mixed water or warm milk and honey taken orally	Inflammation, bronchitis, asthma, ulcer, hypertension
Zingiber Officinale Zingiberaceae	Shunti	Herb	Rhizome roots	Extract the juice along with sugar taken orally	Fever, bronchitis, asthma, cough, digestion problem, diarrhoea, piles, stomach ache, cardiac diseases, anaemia

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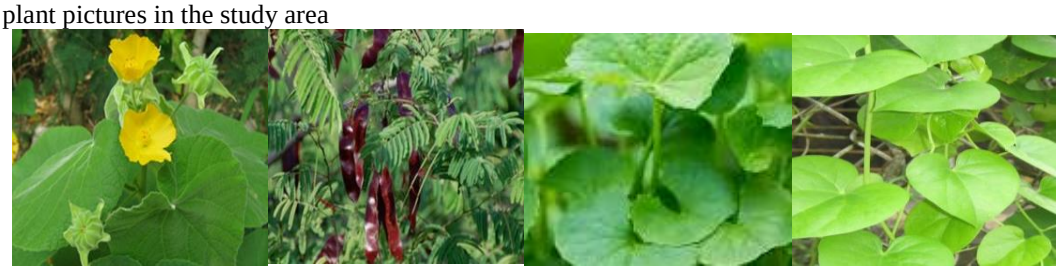
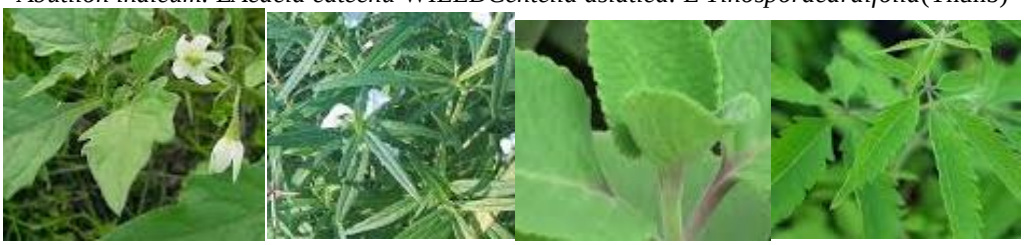
List of medicinal plant pictures in the study area



Abutilon indicum. L*Acacia catechu* WILLD*Centella asiatica*. L *Tinosporacardifolia*(Thunb)



Solanum nigrum L.*Leucus aspera* *Plectranthus ambionicus*Spreng*Vitexnigundo*L.

*Piper betle*L.*Withaniasomnifera*(L.)Dunal *Madhuca longifolia* J.F.Macbr*Sesbaniaauriculatra*L.

*Justicia adhathoda*L.*Sesbania grandiflora* L.*Origanummajorana*L.*Aloe vera* Burnm.f

*Morindacitrifolia*L. *Manihot esculenta* Crantz*CyadondactylonOcimum sanctum* L.

Conclusion

The present investigation was attempted to study about the diversity of traditional medicinal plants in Muthathi Wild Life Sanctuary, Karnataka. This study showed the promising of diversity of the medicinal plants revealing their potentiality by their medicinal properties. In this current study focus towards the availability and uses of medicinal plants in Muthathi Wild Life Sanctuary along with the changes in medicinal plants diversity and community level in the interpretation of medicinal practitioners and also will be helpful for researcher and pharmaceutical industries to find outthe other uses of plants which would be helpful to modern healthcare system.

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