

Folklore Medicinal Plants of Challakere Taluk of Chitradurga District Karnataka India

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Abstract: The present paper deals with the medicinal plants used by the people of Challakeretaluk, Chitradurga district for curing different types of ailments caused by the microbes including some inanimate diseases. A total of 65 plants belongs to 62 families have been documented here for their therapeutic use against different ailments. The herbal prescriptions were prepared from various plant parts of single plant or combination of different plants. The majority of the preparation was made by using water as one of the medium. The mode of application was topical, but in many cases it was also administered orally along with different adjuvants. Viz. cow milk, ghee, honey, curd butter milk and butter, coconut oil etc. were also documented through this study. All the collected plants were also made herbarium and deposited in the Department of Botany, Davanagere University, Davanagere for future study.

Keywords: Tradition, Folk, Medicine, Ailments, Plants.

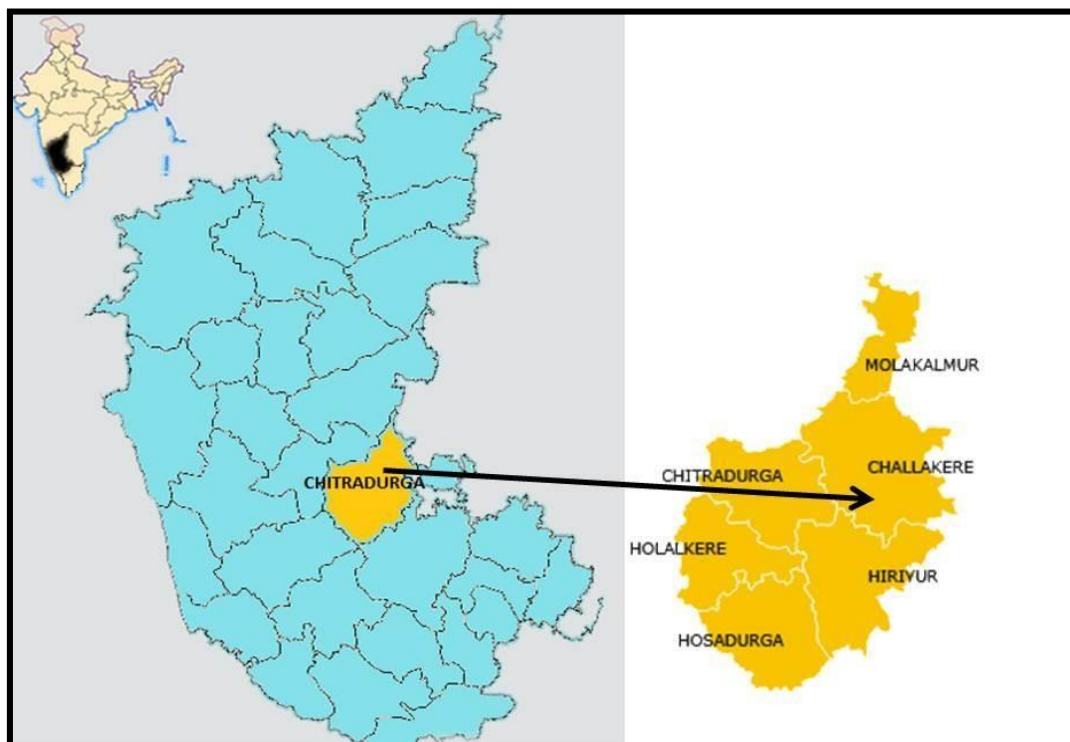
1. INTRODUCTION

Folklore medicinal plants are practiced by Indigenous or native populations around the world and it is reported that the folk healers use 2,500 plant species among these only 60% of the plants serves as regular source of medicine. The popular knowledge of plants used by human is based on thousands of years' experience by "trial and error" method. People learnt how to recognize and use plants including those with Magico-religious functions. The plant use was wide spread in ancient civilizations, until the middle of the 19th century plants were the main source therapeutically agents used by humans. The earliest part of the folklore medicinal plants are based on traditional Ethnobotany, which perhaps only slightly affected by written sources, as only few books or newspapers were published in local languages until the end of the 19th century plants were the main source of therapeutic agents used by humans[1, 2] first appeal to collect folklore on ethno botany was published by well- known pharmacist George Noel Drogendorff in 1877. He states that folk is a group of people who shared at least one significant cultural thing in common way and lore is a traditional culture or behavior shared by members of a folk group. Folklore medicine is the mixture of traditional healing practices or it is a belief that involves the herbal medicine, spirituality and manual therapies or exercises in ordered to diagnoses, treat, or prevent of an alternative medicine, holistic medicine, and eastern medicine named after its historical practices of countries in Asia, China in thousands of years ago. The knowledge of medicinal plants has been gathered from different medicinal systems, such as Ayurveda, Siddha, Unani and Tibetan medicine system. This traditional knowledge as disseminated orally from generation to generations through trial and error method (Saikia et. al.,2006). Each and every traditional community have their own pool of secret of ethno medicinal knowledge about the plants available in their surroundings. In the beginning of 1990s, the study of traditional plant-lore gathered considerable momentum and academic publication in ethno botany almost doubled. The growing interest in ethno botany is due to changing attitudes towards the traditional people. Through the modern day's research and study shows that the man has started his journey from forest itself, which was devoid of toxic environment and cultures have always use plants or plant product to alleviate several diseases, (Shreevanitha and Anitha, 2013). In recent years there has been a tremendous increase on the plant based medicines. The drugs obtained from the plants or plant parts are believed to be much safer than synthetic drugs and they exhibit a remarkable efficiency

on the treatment of various ailments. Hence the folklore medicinal plants reflecting a prominent role in human and environmental interactions [3,4].

India is one of the world richest medicinal plant heritage. The WHO listed 20,000 medicinal plants globally and estimates about the 80% of the populations in developing countries depend on the plants for its medicinal values (Lingaiah and Rao, 2013). So the India is rightly called as “the botanical garden of the world”. In Rigveda it is believed to be the oldest repository of human knowledge about the medicinal plants usage in Indian subcontinent (Jeetendra et al., 2012). A large section of the Indian rural people living far away from the urban areas is still depending on the traditional herbal medicinal for their health care. This is because of the lack of primary healthcare centers and transportation facilities. Besides this medicinal plants are easily available in natural habitats, easily formula table and cost effective with negligible (affordable) price. In addition plants products have side effects. Traditional medicines have often been the source for the new drugs and their active compounds are also useful in caring certain critical ailments[3,4]. Many ethno botanical studies have been reported in several parts of India to document the traditional knowledge before that has been vanishing [4]. Therefore documenting the indigenous knowledge through ethno botanical studies is an important study for the conservation of biological resources and their sustainable utilization. Reports on ethno botanical knowledge in Karnataka state are restricted to certain areas [5].Hence all attempts has been made to take the survey of medicinal plants related to folklore are popularly known as “Folk medicine”. The survey was conducted in Challakeretaluk of Chitradurga district. It is one of drought enduring district of Karnataka.

2. STUDY AREA



Chitradurga district is located in the Southern part of the Karnataka state with much racial and socioeconomic cultural diversity. Chitradurga got its name from Chitrakaladurga an umbrella shaped softy hill found here. The district is bounded on the north by Davangere and Bellary districts, on the south-east by Tumkur district and South-West by Chikkamagalure district, on the West by Shivamogga district and East by Ananthpur district of Andrapradesh state. Chitradurga district consist of six taluks viz., Hosadurga, Chitradurga, Hiriur, Molakalmur and Challaker Among these Challakere taluk is selected as our study area. Challakeretaluk is one of the drought enduring taluk situated 13 Kms away from the Chitradurga. The taluk lies between $76^{\circ} 01'$ and $77^{\circ} 01'$ of the Eastern longitudes and $13^{\circ} 34'$ and $15^{\circ} 02'$ of Northern longitude. It has an average elevation about 585 meters above the sea level. The total geographical area of the taluk is about 2063.93 Km². The total population according to 2013 census reports. The study area comprises of 3, 66,267 of

which 70% of the total population belongs to SC/STs. There are four major tribal communities inhabited in the study area include Myesa Nayaka, Kadugolla, Lambani and Kuruba's. In addition other non-tribal communities who also familiar with plants were also inhabited.

The Challakere taluk is popularly known as "oil city of Karnataka" because oil yielding crops such as groundnut and Sunflower are the major crops in this area. It is also one of the second largest producer of edible oil after Mumbai. The woven black blankets made up of sheep wool by the local Kuruba community are famous for entire state. The study area is relatively hotter compared to other taluk in the district. The maximum temperature having upto 35-42° C. The minimum temperature recorded in the taluk is about 20° C. The rainfall in this area is due to the influence of South-West and North-East monsoon. The average rainfall recorded in their area is about 580 mm at 40 days. The total forest area of the taluk is about 6987 hacters, which is about 3.59% of th total geographical area. Floristic diversity is comparatively rich in this zone. The major forest types on this study area are tropical dry deciduous tropical thorn forests as given the name it is the "upland thorn and scrub vegetation" to the parts of the Challakere taluk[6,7].

3. MATERIAL AND METHODS

The field trip was conducted in different parts of the Challakere taluk of Chitradurga district during the year 2014-15 and obtains the first hand information from the traditional herbal healers by using semi-structured questioner. Kannada is the most widely used spoken and official language of the taluk. Apart from Kannidigas it is also home for Telugu Konkani and Lambadi dialects. In addition there are other ethnic tribes belongs to scheduled tribe Nayak and backward tribe Kadugolla are the major populations in our study area. In addition we are also collected medicinal plants available in and around the study area. The information collected from these professional vydya's are also discussed and cross checked with available literature. It is also slightly differs in the mode of preparation and utilization. The collected information was documented and recorded in the Audio-visual divices. All the collected plant materials were brought to the taxonomy laboratory and prepare herbarium. The collected plant specimens were identified with the help of Flora of presidency of Madras by Gamble (2014). The identified plants were further authenticated by experienced taxonomists who available in our study area. The methodology of the plants enumeration is followed by[8]. The prepared herbariums are deposited in the Department of Botany Davanagere university, Davanagere for future reference.

4. RESULTS

We interviewed 20 persons who were in some way of attachment currently or in past were most likely to report accurately on availability and utility of certain plant species. The present survey yields 65 plants belong to 65 genera and 62 families. The information collected in these plants are also enumerated and arranged in alphabetical order in Table.1. It includes Botanical name, family, Vernacular Names in Kannada, habit, parts used to treat the disease, Mode of preparation and administration with or without adjuvants are mentioned in this paper.

TABLE I:

Sl. No.	Botanical Name with family	Vernacular Name	Habit	Parts Used	Disease Cured / Ailments	Mode of preparation and Administration
1	<i>Abrus precatorius</i> , L. (Fabaceae)	Gulagangi	Climber	Bark	Snake bite	The bark is rubbed on the rough surface of the rock A small drop of the paste is given orally with lemon juice
2	<i>Abuilon indicum</i> , G.Don. (Fabaceae)	Sree mudre gida	Shrub	Root	Paralysis	Initial stage of the disease the fresh root is crushed and boiled to make half glass juice and taken orally for seven days to cure .
3	<i>Actinopteris radiata</i> , (Sw.)Link. (Pteridaceae)	Naviladi	Herb	Tuberous root	Headache	The tuberous root is crushed with three pieces of garlic apply externally on forehead to relive headache.
4	<i>Adhatoda vasica</i> , Nees. (Acanthaceae)	Aadusoge	Shrub	Leaves	Spasmodic	The dried leaves are burned on fire and the smoke is inhaled to cure

5	<i>Amaranthus spinosus</i> , L. (Amaranthaceae)	Mullu harive	Herb	Tendered leaves	Mal nutrition	The tendered leaves are boiled with water and add a table spoon common salt taken orally for 5-6 days to improve the nutritional abnormality.
6	<i>Andrographis Paniculata</i> , Nees. (Acanthaceae)	Nelabevu	Herb	Leaves	Snake bite & Skin rashes	The leaves are hand squeezed and apply externally on skin for 10-15 days to cure skin rashes. The root paste is mixed with lemon juice to given orally to alleviate snake venom.
7	<i>Annona squamosa</i> , L. (Annonaceae)	Seethphal	Shrub	Seeds / Leaves	Whitlow & Maggot wounds.	The hand squeezed leaf juice is applied externally on whitlow for 3-4 days. The seeds are powdered and mixed with ghee to applied externally to cure maggot wounds.
8	<i>Argemone Mexicana</i> , L. (Argemonaceae)	Datturi	Herb	Yellow sap	Redness of eye	The yellow sap is smeared on eye lids to remove redness of eye due to bacterial infection.
9	<i>Aristolochia indica</i> , L. (Aristolochiaceae)	Eshwari balli	Climber	Root	Snake bite & Tonsillitis	The root is crushed and mixed with children's urine and the filtered juice is given orally to alleviate snake venom. The leaves are made into paste and add a pinch of limestone to smear on tonsils to cure for seven days.
10	<i>Aerva lanata</i> , Juss. (Amaranthaceae)	Bilesuli	Herb	Whole plant	Lithotripter	The aerial parts of the plant is boiled and a cup of juice is taken orally for one month to dissolve kidney stone
11	<i>Asparagus racemosus</i> , Willd. (Liliaceae)	Halavu makkala balli	Struggling Herb	Root, tuber	Galactagogue	The tuberous roots are washed and crushed with ginger, the paste is mixed with cow milk to given orally for five days to increase milk yield in nursing mother
12	<i>Basella alba</i> , L. (Basellaceae)	Huli soppu	Herb	Whole plant	Throat infection	The boiled juice along with ginger and garlic is taken orally for three days to relive throat infection.
13	<i>Boerhaavia diffusa</i> , L. (Nyctaginaceae)	Balevadike	Herb	Whole plant	Anaemia	The boiled aerial parts are used as vegetable to improve Anaemia
14	<i>Butea frondosa</i> , Koen. (Fabaceae)	Muttuga	Tree	Seeds	Abscess	The seeds are rubbed on rough stone slab with a pinch of common salt to apply externally on Abscess to remove puss
15	<i>Cissampelos pareira</i> , L. (Menispermaceae)	Pathakada balli	Climber	Leaves	Common wounds	The leaves are made into paste is applied externally on common wounds caused by agricultural weapons to cure.
16	<i>Cajanus cajana</i> , (L). Huth. (Fabaceae)	Thogri	Shrub	Leaves	Cut wounds	The fresh leaves are hand squeezed and the juice is dropped on cut wounds to stop bleeding and heal up within a month.
17	<i>Canthium parviflorum</i> , Lamk. (Rubiaceae)	Khare	Shrub	Leaves	Infertility	The fresh leaves are made into paste is taken orally at the time of last 20-25 days of menstrual period to become conceive.
18	<i>Capcella bursa-pastoris</i> , Moench. (Brassicaceae)	Ganjala gida	Herb	Whole plant	Skin rashes	The hand squeezed fresh plant juice is applied externally for 3-4 days to cure.
19	<i>Caralluma adsendens</i> , R. Br. (Asclepiadaceae)	Mangana kodu	Herb	Stem	Tooth ache	The stem mucilage is applied on gums to relieve tooth pain

20	<i>Carica papaya</i> , L. (Caricaceae)	Parangi Mara	Tree	Fruits	Abortion	The tendered fruit pulp is taken orally for 3 days to abort approximately one month old embryo.
21	<i>Carmona retusa</i> , Vahl. (Boraginaceae)	Ele-adike soppu	Herb	Leaves	Liver problem	The leaves are used instead of Tobacco to effect on liver function
22	<i>Cassia auriculata</i> , L. (Caesalpiniaceae)	Thangadi	Shrub	Flower buds	Dysentery	The 1-2 young flower buds are crushed with butter milk to taken orally for 3-4 days to stop dysentery.
23	<i>Cassia mimosoides</i> , L. (Caesalpiniaceae)	Sanna tagache	Herb	Whole plant	Fever	The fresh plant is pounded with ginger, garlic and Jaggery to inhale smell for 3-4 days to cure fever.
24	<i>Celosia argentea</i> , L. (Amaranthaceae)	Anne soppu	Herb	Leaves	Joint pain.	The fresh leaves are boiled with tor-dhal to taken orally for once in a week to relieve Joint pain
25	<i>Citrus aurantium</i> , L. (Rutaceae)	Elli-Kayi	Shrub	Bark	Gastritis	The pickles made by this fruit is taken daily before food to relief gastritis.
26	<i>Clerodendron inerme</i> , Gaertn. (Verbinaceae)	Visham-dhari	Shrub	Leaves	Gonorrhoea	The fresh leaf juice is applied externally on infected part to cure gonorrhoea.
27	<i>Clitoria ternatea</i> , L. (Fabaceae)	Shanka pushpi	Climber	Flowers	Leucorrhages	The fresh flower juice is mixed with candiesuger and taken orally with cow milk for 5-6 days to stop leucorrhages in women.
28	<i>Coccinia indica</i> , W. & A. (Cucurbitaceae)	Thonde balli	Climber	Leaves	Gout	The fresh leaves are squeezed and mixed with a pinch of Lime cake to applied externally for 7-8 days to cure gout.
29	<i>Cordia myxa</i> , Roxb. (Boraginaceae)	Challe mara	Tree	Root	Fever	The dried root powder is mixed with a table spoon of honey to take orally for 3-4 days to cure fever.
30	<i>Daucus carota</i> , L. (Apiaceae)	Kempu Mulli	Herb	Root	Low vision	The fresh conical root is edible to take continuous 30 days to improve vision problems.
31	<i>Delonix elata</i> , Gamb. (Caesalpiniaceae)	Vatha narayana	Tree	Bark / Flower	Haemorrhages	The shade dried white flowers are powdered and mixed with a half glass butter milk to taken orally to control excess bleeding. The bark decoction also used as same purpose.
32	<i>Dendrothoe falcata</i> , (L.f.) Ettingsh (Loranthaceae)	Maduka	Herb	Leaves	Abscess	The fresh leaves are made into paste and add a pinch of common salt to apply externally for 5-6 days to relieve pain
33	<i>Dodonea viscosa</i> , L. (Sapindaceae)	Bandre soppu	Shrub	Leaves	Bone fracture	The fresh leaves are shade dried and powdered is mixed with cow ghee to apply externally on damaged spot for one month to cure.
34	<i>Echinops echinatus</i> , DC. (Acanthaceae)	Bhramhadandi	Herb	Inflorescence	Haemorrhoids	The globose like head inflorescence is burned the ash is applied externally on anus for one week to relieve pain and cure shortly.
35	<i>Eclipta alba</i> , Hassk. (Asteraceae)	Garugada soppu	Herb	Leaves	Hair fall	The fresh leaves are made into paste is used like a shampoo to avoid natural hair falling.
36	<i>Emelia sanchifolia</i> , DC. (Asteraceae)	Halu mulangi	Herb	Whole plant		The leaf decoction is taken orally for empty stomach to reduce suger level in diabetic patients

37	<i>Erythroxylonmonogynum</i> , Roxb. (Erythroxylaceae)	Javadhare gida	Shrub	Leaves	psoriasis	The leaves are made into paste is applied externally on infected part for 10-15 days to cure.
38	<i>Euphorbia hirta</i> , L. (Euphorbiaceae)	Achhe soppu	Herb	Latex	Dermatitis	The fresh latex is applied externally in the early morning for 15 days to cure
39	<i>Ficus drupacea</i> , Thunb. (Moraceae)	Gonimara	Tree	Young leaves	Small pox	The young leaves are crushed and applied externally for 7-9 days to cure
40	<i>Hemidesmus indicus</i> , R. Br. (Periplocaceae)	Sogade beru	Climber	Root	Gastritis	The fresh roots are crushed and boiled along with water to make decoction to take orally for 3 months to relieve inflammation
41	<i>Hibiscus rosa-sinensis</i> , L. (Malvaceae)	Dasavala	Shrub	Leaves	Shining Hair	The leaves are made into paste is applied on hairs after one hour wash the hairs with cold water to become shining
42	<i>Holarrhena antidysentrica</i> , Wall. (Apocynaceae)	Marale mara	Tree	Latex	Dysentery	The latex is applied on joggary and shade dried is taken orally for 1-2 days to control dysentery
43	<i>Lantana camara</i> , L. (Vetrbinaceae)	Rozi gida	Shrub	Leaves	Beli gida	The fresh leaves are crushed and inhale the smell for few minutes to heavy drunker after that he become normal man
44	<i>Lepidogathis cristata</i> , Willd. (Acanthaceae)	Gowri mudi	Herb	Inflorescence	Eczema	The globose like inflorescence is burned and the ash is mixed with coconut oil to apply externally on the entire body for few days to cure.
45	<i>Leptadania reticulata</i> , W. & A. (Asclepiadaceae)	Hale soppu	Climber	Leaves	Galactaguae	The leaves are used as vegetable twice in a week for one month to increase milk yield in nursing mother.
46	<i>Moringa oleifera</i> , Lam. (Moringaceae)	Nugge mara	Trees	Bark	Leucorrhage	The bark is boiled with water and add candy sugar to make juice is taken orally for 3-4 days in empty stomach to stop white discharge in adult women.
47	<i>Musa paradisiaca</i> , L. (Musaceae)	Bale gida	Pseudo herb	Tender stem	Kidney stone	The tendered part of the stem is chapped and boiled to make vegetable to take orally for 3-4 times in a month to dissolve stone <0.3 mm in size.
48	<i>Nymphaea Pubescens</i> , Willd. (Nymphaeaceae)	Bili Naidele	Herb	Fruit	Haemorrhoides	The fruits are grinding with lime stone to apply externally to cure haemorrhoids
49	<i>Opuntia dillenii</i> , Haw. (Dilliniaceae)	Papas kalli	Shrub	Fruits	Dysentery	The fresh fruits are squeezed and the juice is mixed with butter milk to taken orally for 3-4 days to stop dysentery.
50	<i>Oxalis corniculata</i> , L. (Oxalidaceae)	Uli soppu	Herb	Leaves	Mouth ulcer	The leaves are Sour to taste is chewed daily for 3-4 days to relieve burning sensation in mouth.
51	<i>Pergularia extensa</i> , N. E. Br. (Asclepiadaceae)	Halu kuritige	Climber	Latex	Boils	The fresh latex is applied directly on boils for 10-15 days to cure
52	<i>Phoenix sylvestris</i> , Roxb. (Arecaceae)	Eechalu mara	Tree	Watery Sap	Asthama	The fresh watery sap is extracted and directly taken orally for 1-2 months to relieve breathing problem due to asthma.
53	<i>Phyllanthus amarus</i> , Schum.. & Thonn. (Euphorbiaceae)	Nela nelli	Herb	Whole plant	Jaundice	The fresh plant juice is mixed with cane sugar juice to taken orally for 5-6 days to cure jaundice.

54	<i>Plumbago zeylanica</i> , L. (Plumbaginaceae)	Bili chitramoola	Shrub	Flower	Sterility in women	The flowers are shade dried and make fine powder a pinch of powder is mixed with a glass of goat milk to taken orally for 3-4 times in a month to become sterile.
55	<i>Portulaca quadrifida</i> , L. (Portulacaceae)	Dodda Goni soppu	Herb	Whole plant	Liver disorder	The fresh herbs are boiled and used as vegetable for 3-4 times in a month to relieve liver disorders.
56	<i>Punica granatum</i> , L. (Punicaceae)	Dhalimbe	Shrub	Fruits (Tendered)	Throat infection	Tendered fruits are eaten at the time of itching to relief.
57	<i>Ricinus communis</i> , L. (Euphorbiaceae)	Haralu gida	Shrub	Leaves	Cut wounds	The fresh leaves are hand squeezed and add a pinch of turmeric powder to apply externally to cure wounds caused by agricultural weapons.
58	<i>Sapindus laurifolius</i> , Vahl. (Sapindaceae)	Antuvala	Tree	Fruits	Hair shampoo / local shampoo	The fruits are hands squeezed and the mucilage is applied externally on hairs to prevent itchy scalp.
59	<i>Syzizium jambolanum</i> , DC. Var. <i>axillare</i> , Gamb. (Myrtaceae)	Nerale	Tree	Seeds	Diabetes	The seeds are finely powdered and mixed with a cup of hot water to take orally for empty stomach to reduce high sugar level into normal in diabetic patients.
60	<i>Terminalia chebula</i> , Retz. (Combretaceae)	Alalekayi	Tree	Seeds	Whooping cough	The seeds are shade dried and powdered is mixed with a cup of hot water and leave it for 10 minutes take orally twice a day for 3-4 days to relieve cough.
61	<i>Thespesia populnea</i> , Cav. (Malvaceae)	Hoovarsi mara	Tree	Yellow latex	Ring worm	The yellow latex is applied externally for 7-9 days to cure the disease.
62	<i>Tinospora cordifolia</i> , Miers. (Menispermaceae)	Amruthaballi	Climber	stem	Anti venom	The soft stem is crushed and mixed with a 50 ml of butter milk to given orally to vomit poison.
63	<i>Tribulus terrestris</i> , L. (Aizoaceae)	Mullu neggalu	Herb	Whole plant	Lithontrophic	The fresh plant is used as vegetable for once in a week to prevent stone formation.
64	<i>Tylophora zeylanica</i> , Done. (Asclepiadaceae)	Aadumuttada balli	Climber	Leaves	Asthama	The shade dried leaves are powdered and smoked for 3-4 days to relive wheezing
65	<i>Vitex negundo</i> , L. (Verbinaceae)	Bili lakki	Shrub	Leaves	Dermatitis	The fresh leaves are made into paste is applied externally on skin to cure infection caused by microbes.

5. DISCUSSION

The present study deals with the plants used against different ailments caused by animate and inanimate agents which are mainly responsible for the cause of disease in and around the study area. The findings of the present investigation specify that wild medicinal plant species are closely associated with rural traditional and also tribal communities of challakere taluk. In this study the folklore medicinal plant survey reveals that the different plant parts having different types of secondary metabolites which are very much useful in certain diseases. The particular plant part which effect on particular diseases [8,9]. The plant material either fresh or dried are being used in many ways Panday and Tripathi [9]. which are used in the form of decoction, Pastes, Extracts, Juices and powder are also very much useful in the mode of external and internal administration [10-12]. In this contexts the combination of other plant parts of the same species or different species of the same plant part are also sometime used to treat several diseases for quick healing. In addition other ingredients such as Honey, Milk, buttermilk, butter, ghee, tendered coconut water, Pepper, Garlic, and onion are the other home remedies are also play a very important role in the preparation and administration of drugs and also enhance the delicacy of drugs in the treatment of diseases [13,14]. The herbal preparations are mainly depends on fresh plant material. Dried plant materials are also some time very much useful in the non-availability of fresh plant material.

Recommendation of the dosage of drugs and duration is mostly depends upon the age and severity of illness. Majority of the drug formulations are external applications ,only few of them are prepared by careful application of quality ingredients. In certain cases the herbal practioners of our study area prefer to use only single plant species for specific ailments rather than the combination of plant parts. Apart from this the medicinal uses of herbal drugs and their mode of preparation, administration and utility is also varies from one community to other community[14,15]. It is expected that the results of the study will be useful for decision makers and those who are responsible for the management of medicinal and aromatic plants to promote a better understanding under which conditions the sustainable use of these plants can be achieved in the national parks. Centinkaya (2010) Few plant species have declined to serious extent ,among them, Cassia tora, Abrus precatorius , Aristolochia indica Cassia senna, Evolvulus alsinoides etc due to collection and utilization of large number of plants in herbaceous stage by local people and traditional healers[16,17].

6. CONCLUSIONS

Traditional people still depends on these plants to cure certain ailments and avoid insects, pests, bedbugs and mosquitoes. To assess the current status of production, utilization and conservation of these medicinal plants in and around the study area and identify the future need of conservation and opportunities for their development. In some cases the population size of a species can inherently be low or at times anthropologic pressures in the form of grazing trampling and extraction methods results in the decline of population..Cultivation is the effective way of conservation and it ensures a steady supply.The erosion of plant biodiversity is a matter of fact that requires the use of new developments. To conserve the germplasm of the endangered species through tissue culture and various plant breeding techniques. Therefore conservation and sustainable use of these species are necessary to meet the needs of present and future generation. In this context various development and research actions have been attempted by the Government and non-governmental agencies. National and International conservation as well as developmental organizations to find out solutions to conserve the germ plasma. It is expected that the results of the study will be useful for decision-makers and those who are responsible for the management of medicinal plants to promote a better understanding under which conditions the sustainable use of these plants can be achieved in the national parks.Inthis study we create awareness on the value of medicinal plants among the producers in ordered to promote cultivation with a special focus to small scale farmers.

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