

Original Research Article

<http://dx.doi.org/10.20546/ijcmas.2016.511.035>

Traditional Healthcare Knowledge of Sedum Taluk, Kalaburgi, Karnataka, South India

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ABSTRACT

Keywords

Folklore People,
Medicinal Plants,
Sedum Taluk.

Article Info

Accepted:

16 October 2016

Available Online:

10 November 2016

Present work was carried out among the folklore people of Sedam Taluk region during the year 2014-15. Ethno-botanical uses of 33 medicinal plants belonging to 28 families were documented for various human ailments. The major families are Euphorbiaceae, Aslepidaceae and Apocyanaceae (2 species each) and most were herbs (30 *sp.*) and leaves contributed mainly to the plant part used for medicine preparation (24 ailments) followed by seed, roots and fruits. This report includes ailments; botanical name of the plant, local name, family of the plant, part used and details about usage related human health problems.

Introduction

Medicinal plants have a promising future because there are about half million plants around the world (Dilfuza *et al.*, 2015; Bassam and Rasool, 2012). The most of them their medical activities have not investigate yet and their medical activities could be decisive in the treatment of present or future studies (Rasool, 2012; Chopra and Nayar, 1956). Herbal medicines are the synthesis of therapeutic experiences of generations of practicing physicians of indigenous systems of medicine for over

hundreds of years. They are known to be oldest health care products that have been used by mankind all over the world in the form of folklore medicines or traditional medicines or ethnic medicines. The therapeutic use of herbal medicines is gaining considerable momentum in the world during the past decade (Dubey *et al.*, 2004). The World Health Organization (WHO) estimates that herbal medicine is still the mainstay of about 75-80% of the world population, mainly in the developing

countries for primary health care because of better cultural acceptability, better compatibility with the human body and lesser side-effects.

Climate change and global warming are the warming calls and very well acknowledged threats today worldwide and almost all the species of world biodiversity are affected by the same (Abdul, 2013). In recent times, these anthropogenic activities have already knocked the door of existing biological resources worldwide exerting a pressure apparently or none apparently. On the living style and resources practices by the people of Ayurveda conceivably the old pioneer of all medicinal system of world uses various resources like plants animal and minerals for alleviation of illness climate change may not merely biggest threat to the local medicinal plant practitioners, but it is well acknowledged that, the existing used by the practitioners of this system will be highly affected in future due to increasing threat from anthropogenic pressure and climate change. Medicinal plant conservation strategies need to be understood and planned for based on an understanding of indigenous knowledge and practices (Parashurama and Kavyashree, 2015). Habitat loss is one of the threats to medicinal plants, change in environment also contribute to the change in ecological niche. Over exploitation is another cause but change in status of medicinal plants within its environment and community affects its availability in the particular area. As mentioned earlier, change in climate whether it is environmental or man made changes greatly influences on the community structure of the medicinal plants (Shivakumar and Parashurama, 2015; Raju and Parashurama, 2015). Least concentration has been given in this direction in research fields. In Karnataka, many workers reported on tribal groups and rural districts to document the ethno-

medicinal value of plants used by them (Harsh *et al.*, 2002; Parinitha *et al.*, 2005; Prakasha and Krishnappa, 2006). Studies have been carried out in the Chikmagalur and Chitradurga (Shivanna *et al.*, 2008; Hiremath *et al.*, 2010; Ramachandra *et al.*, 2012; Shivakumar and Parashurama, 2015; Raju and Parashurama, 2015; Vinay *et al.*, 2015). Comprehensive detailed information on ethno-botanical knowledge in Karnataka that are lacking to certain areas (Parashurama and Kavyashree, 2015; Bhandari *et al.*, 1995; Parinitha *et al.*, 2004, 2005; Somashekar Achar and Shivanna, 2006). Present study focus towards the availability and uses of medicinal plants in Sedam Taluk along with the changes in medicinal plants community level in the view of medicinal practitioners.

Materials and Methods

The study area, Sedam Taluk is located between North latitude 17.183⁰ and between East longitude 77.283⁰ in Northeast parts of Karnataka. The town is spread over an area of 5.5 square kilometers. The mean temperature ranges between 32-43⁰C and 07-24⁰C in summer and winter season respectively. Sedam Taluk shares borders with three Taluk in the Kalaburgi district Chitapur Taluk to the west, chincholi Taluk to the north and Yadagiri district to the south. It also borders Tandur Taluk of the Rangareddy district of the Andhrapradesh and Kodangal Taluk of the Mahebnagar district in Andhrapradesh to the rest. As of 2015 census Sedam had population of 31529. Males constitute 51% of the population and Females 49%. Sedam has an average literacy rate of 58% lower than the national average of 59.5% male literacy is 66%, 16% of the population is under 6 years of age.

During the study, phytoethnomedicine information of Sedam Taluk among the

people is collected through interviews followed by the questionnaire (Parashurma and Kavyashree, 2015). The peoples of all the age groups were interviewed and their knowledge about the medicinal plants was documented. The people are first enquired whether they give the herbal medicine to common ailments like cold, cough, dysentery fever, stomachache, headache etc., were collected. The information regarding the medicinal plants, preparation of medicine, dosage etc., were collected. The people were also informed about the herbal plants availability during present days and olden days to compare the ecological status. After each interview the interviewed persons were requested to show the medicinal plants whatever they informed. The medicinal plants were collected and are photographed also. During the visit it is noticed that some peoples who practiced the medicine are not ready to disclose the name of the plant. 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 (Gamble *et al.*, 1935) and other medicinal plants reference books.

Results and Discussion

To investigate the ethno botanical uses of Sedum Taluk and their ecological status, 15 local residents from different villages were interviewed and data was collected. The present study reveals that in the Sedam Taluk local residents used 33 species of plants belongs to 23genera and 28 families. The ethnobotanical survey conducted in India has brought to light several promising medicinal plants which are being used by the ethnic peoples and by traditional rural people in their health care of centuries. This has also led to the discovery of some unique and indigenous system of medicine practiced in India since time immemorial.

Table.1 List of plants used by folklore people in Sedum Taluk for human healthcare purposes

Sl. no	Scientific name/Family	Common name	Part used	Mode of use	Disease
01	<i>Datura metel</i> L. Solanaceae	Belidatri	Leaf	Leaf extract was employing over a region of swelling	Bulge
02	<i>Cassia sophera</i> L. Caesalpinaceae	Chagachi	Seed	Powdered seed mix with coconut oil use for itching part of the boy	Allergy
03	<i>Daemia extense</i> (Jacq.) R.Br.ex. Schutt. Asclepiadace	Kurataga	Leaf	Extracted leaf juice taken orally	Tummy ache
04	<i>Calotropis gigantea</i> L. Apocynaceae	Yakke gida	Leaf bud	Bud, clustered apple bud, paan leaf mix with lime and employing for treatment of lump	lump
05	<i>Jatropha gossypifolia</i> L. Euphorbiaceae	Avalgida	Leaf bud	Crush the leaf and taken orally with	Jaundice

				sheep milk	
06	<i>Tagetes erecta</i> L. Asteraceae	Chendhuvu	Leaf	Wash the ear and apply <i>Tagetes erecta</i> leaf extracted in pus formed region of ear	Ear seepage
07	<i>Annona squamosa</i> L. Annonaceae	Seethapal	Seed	Crush the seed in water and apply over the swelling part	Bulge
08	<i>Mangifera indica</i> L. Anacardiaceae	Mavu	Seed	Mango seed is burn it and extracted paste is applied	Swelling
09	<i>Cassia occidentale</i> L. Leguminosae	Doddaehaga chi	leaf	Extracted leaf applied over burnt place after the drying of scorched part	Scorched
10	<i>Phyllanthus amarus</i> Schumacher Euphorbiaceae	Hajarigida	Leaf	Extracted leaf juice taken orally	Blood pressure
11	<i>Aristolochia indica</i> L. Aristolochiaceae	Ganigyan gida	Leaf	Leaf extracted juice is mixed with pepper taken orally	Pits
12	<i>Piper nigrum</i> L. Piperaceae	Kalumenasu	Seed	Powder mixed with jiggery and applied over bite portion	Scorpion bite
13	<i>Achyranthes aspera</i> L. Amaranthaceae	Uttrarani	Leaf	Leaf powder is mixed with jiggery and applied over corn part	corns
14	<i>Moringa oleifera</i> L. Moringaceae	Nuggegida	Leaf	Leaves are boiled in salt water and taken orally	Cholera, Cough
15	<i>Annona squamosa</i> L. Annonaceae	Sithapala	Seed	Powdered seed is mixed with coconut oil apply over the wounds	Gash
16	<i>Acacia aspera</i> L. Mimosaceae	Huchababli	Seed	Powdered seed mixed with honey taken orally	Scorpion bite
17	<i>Acacia anegadensis</i> Britton Leguminosae	Mullu mutalu	Leaf	Take a jiggery with <i>Acacia anegadensis</i> leaf orally	Dog bite
18	<i>Cucumis sativus</i> L. Cucurbitaceae	Soutekai balli	Leaves	Leaves are taken orally	Scorpion bite
19	<i>Opuntia humifusa</i> (Raf.) Raf. Cactaceae	Papaskalli	Fruit	Fruit taken orally	Headache
20	<i>Annona squamosa</i> L. Annonaceae	Sitapala	Unripe fruit	Tablets are prepared using powder of unripe fruit and horsegram powder,	Intestinal infection

				daily a tablet is taken for 7 successive days and on the 7 th day, a teaspoonful castor oil is given orally to expel worms from the intestine. Seed powder paste is applied on head and washed to remove lice	
21	<i>Argemone mexicana</i> L. Papaveraceae	Datturgida	Root	Root powder is taken as a antihelminthic. Stem latex is applied over affected skin, blister and oral ulcers	Oral ulcers
22	<i>Asparagus racemosus</i> Willd. Liliaceae	Shatavari	Root	Shatavari and Withania root powder taken in the morning enhance fertility. Fresh root extracts is taken as diuretic	Infertility
23	<i>Barleria prionitis</i> L. Acanthaceae	Mullugoranti	Root	Root decoction is used as mouthwash to relieve tooth ache and to prevent decay	Tooth decay
24.	<i>Boerhavia diffusa</i> L. Nyctaginaceae	kommegida	Root	Root powder and honey is orally taken	Infertility
25	<i>Barleria prionites</i> L. Acanthaceae	Mullugoranti	Leaf	Fresh leaf paste is applied on the scabies	scabies
26	<i>Boerhavia diffusa</i> L.nom.cons. Nyctaginaceae	kommegida	Leaf	Leaf is pounded and filtered, filtrate is used as eye drop	Eye irritation
27	<i>Datura metal</i> L. Solanaceae	Datturagida	Leaf	Leaf and shade dried flower is smoked to treat asthma	Asthama
28	<i>Daucus carota</i> L. Apiaceae	Gajjari	Root	Carrot juice is given daily to improve digestion and good eye sight	digestion and good eye sight
29	<i>Gymnosporia Montana</i> (Roth) Benth. Celastraceae	Tonasigia	Leaf	Tender leaf extract along with curd is taken orally	Dysentery
30.	<i>Mentha arvensis</i> L. Lamiaceae	Pudina	Leaf	Leaf juice along with equal part of lime juice taken orally	vomiting

31	<i>Momordica cymbalaria</i> Hook.f Cucurbitaceae	Karchikai	Root	Root tuber grounded into paste, with pinch of pepper powder taken in the Morning (during) early period of pregnancy	Abortic agents
32	<i>Phyllanthus fraternus</i> G.L.webster Euphorbiaceae	Nelanelli	Leaf	Leaf parts pounded and mixed with butter milk taken orally	Jandice
33	<i>Tylophora indica</i> (Burn.f) merill Asclepiaceae	Adumuttada gida	Leaf	Fresh leaves eaten daily	Asthma
34	<i>Vinca rosea</i> (basionym) Apocynaceae	Sadamallige	Leaf	Dried leaves powdered boiled in water is taken orally	Blood Pressure
35	<i>Atylosia sericea</i> Benth.x.Baker Fabaceae	Aditogari	Seed	Powdered seed is mixed with ghee taken orally	Mentality
36	<i>Enicostemma hyssopifolium</i> (Wild.)ver Gentianaceae	Chirayath	Leaf	Extracted leaf is taken orally	Malaria
37	<i>Emex spinosa</i> (L.) campd. Polygonaceae	Neggigida	Leaf	Extracted leaf juice is applied over the corns	corns
38	<i>Coriandrum sativum</i> L. Apiaceae	Kottambari	Leaf	Extracted leaf Juice is applied over the burnt part	smolder
39	<i>Gouania tiliaefolia</i> L. Rhamnaceae	Singari gouri	Seed	Powdered seed is mixed with coconut oil applied on pus formed region of pus formed in the ear	Ear seepage
40.	<i>Ficus hispida</i> c.f Moraceae	Nela hatti	Leaf/ Seed	Fresh leaves are boiled in tea and taken orally	Constipation

Majority of plants species are herbs followed by trees. The leaves exhibiting main contribution towards treatment of 24 ailments followed by seed (08), Root (04) and fruit (02). The folk and hakims of sedam Taluk people use certain plants to treat specific diseases like *Daemia extensa* for Tummy ache, *Jatropha* for jaundice, *Cucumis sativus* for scorpion bite and for ear seepage, *Aristolochia indica* for pits, *Ptyllanthus amarus* for blood pressure,

Acacia anegadenis for dog bite, *Opuntia humifusa* for head ache, *Gymnosporia montana* for Dysentery, *Emex spinosa* for corns, *Ficus hispida* for constipation. The *Annona squamosa* recorded as for more than one ailment like gash, Intestinal infection and Bulge. The resident people when enquired about the ecological status of the medicinal plants based on their availability in the study area, they opined that many medicinal plants were available in olden

days but their availability is scanty now at least for few plants. The reason behind this is the loss of habitat and much anthropogenic activity. And few respondents opined that the dust came from surrounding factories may be the reason behind the less availability of the medicinal plants.

Sedam Taluk folk people have an immense knowledge of phyto-ethno-medicine. The information regarding the medicinal plants, preparation for medicine, dosages etc. were collected by them. The plants were also collected for the herbarium from the interviewed person. The presence of such a these medicinal plant species and associated ethno-medicinal knowledge in the district compared to number of species reported for other regions in Karnataka (Harsha, 2002; Bhandary *et al.*, 1995) indicates that the area has good diversity of medicinal plant species including a rich source of indigenous knowledge. The study also revealed that the old age persons have the lot of information but is goes on decrease towards the younger generation of the locality tends towards the Allopathic medicine and they neglect their own traditional system of medicine. Present work, an attempt has been made to document the traditional phytomedicine of this locality. If this work have not been done the knowledge of phytomedicine will gradually lost from the locality due to the modernization.

Acknowledgement

The authors sincerely acknowledge Dept. of Environmental Science, Gulbarga University, Kalaburgi, India for providing facilitates to carry over the work. The authors express their sincere thanks to the local herbal practitioners. Authors are highly obliged with the help rendered by Panchavati Research Academy for Nature, Kalamanchi, Karnataka and valuable suggestions.

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How to cite this article:

Prakash Kariyajjanavar, Sandesh Yargol, K.G. Somashekar Achar and T.R. Parashurama. 2016. Traditional Healthcare Knowledge of Sedum Taluk, Kalaburgi, Karnataka, South India. *Int.J.Curr.Microbiol.App.Sci*. 5(11): 321-328. doi: <http://dx.doi.org/10.20546/ijcmas.2016.511.035>