

## RESEARCH ARTICLE

# Medicinal plants used by local vaidyas in Gaval village, At Hukkeri Taluk, Belgaum district

Jyoti S.Kawalekar

K.L.E.Society's R.L.Sc. Institute Belgaum, Karnataka-, India

*Corresponding author: Dr Jyoti S.Kawalekar (jskawalekar@gmail.com)*

### ABSTRACT

Traditional knowledge of Local Vaidyas about medicinal plants and their importance in local health care practices is well known since Vedic period. Plants are considered as divine in origin and were worshipped as Mother (Goddess). The science of Ethnobotany refers to a branch that deals with a cumulative body of traditional knowledge about the interaction between human and the vegetation around him and more specifically how native people perceive, manage and utilize the plants around them. Ethnobotanical documentation is one way of capturing this body of knowledge. However up to few decades back the herbal medicines were replaced by synthetic medicines due to their quick effect. But it is interesting to know that global trend is now going back to natural way of living and necessity of herbal medicine is now being realized, due to side effects of allopathic medicines. However there is lack of information and documentation of application of different medicinal plants in certain areas. Hence the present survey was undertaken in Gaval village, of Hukkeri Taluk of Belgaum District in order to document the knowledge of medicinal plants used by vaidyas in the study area. The survey gathered information about local names of medicinal plants, plant parts used in treatment and techniques adopted by vaidyas in preparation of herbal formulations. There is urgent need of recording all ethnobotanical information before they are lost and continuous efforts should be made to collect the information which will provide avenue for future generation.

**Key words:** Ethnomedicine, Ayurveda, Vaidyas, Traditional knowledge, medicinal Plants, traditional uses,

### INTRODUCTION

Herbal medicine is widely practiced throughout the world from time immemorial and is safe and environment friendly. Traditional knowledge of Local Vaidyas about medicinal plants and their importance in local health care practices is well known since Vedic period. The science of Ethnobotany refers to a branch that deals with a cumulative body of traditional knowledge about the interaction between human and the vegetation around him and more specifically how native people perceive, manage and utilize the plants around them. Ethnobotanical documentation and information reveals the

great potential of ethnobotanical knowledge as a key to largely untapped biological and genetic resources. They comprise of one of the unique treasure and rich source of diversified ethno-botanical wealth. However up to few decades' back the herbal medicines were replaced by synthetic medicines due to their quick effect, but owing to their side effects, herbal medicines once again got the momentum. Thus, there is a vital need to conserve such medicinal plant species for the benefit of humankind before it vanishes. There is also lack of information and documentation of application of different

medicinal plants in certain areas. Hence the present survey was undertaken in Gavanal village, of Hukkeri Taluk of Belgaum District in order to document the knowledge of medicinal plants used by vaidyas in the study area.

## METHODOLOGY

Field surveys were undertaken across the parts of Gavanal village of Belgaum District of Karnataka since May 2010. Regular visits were made to collect the data. A semi-structure questionnaire survey was conducted among knowledgeable traditional Vaidyas randomly with a view to document the knowledge on the use of medicinal plants. The survey also gathered information about the local names of medicinal plants, plant parts used in treatment, and number of ailments being treated by medicinal plant formulations.

## RESULTS AND DISCUSSION

During the course of the study, a total of 45 medicinal plants species were documented, of which 18 were herbs, 16 trees, 05 shrubs and 06 climbers (Graph-No. 1.). In majority of cases, extract from the leaves 31.1% were used for curing different ailments, followed by fruits 26.6%, seeds 15.5%, whole plant 11.1%, roots and stem 6.6% each and Rhizomes 2.2% rhizome/roots (Graph-No. 2.). The information about the botanical name of the plant, local name, plant parts used and uses have been given (Table 1). These plants were used for curing several diseases. (Table -1). Most of the plants used were general ones. Collection of medicinal plants is a source of livelihood for the local herbal healers. It is observed that the Vaidyas are usually

unwilling to disclose their knowledge about the uses of different plant species, keeping in mind, improper use of the medicine, fear of over exploitation of plant species and fear of losing their status in the local community. The vaidyas were even reluctant to give exact formulations on grounds that this would damage their professional income if known outside. However, they did mention that most formulations were either decoctions, pastes or extracted juices from crushed or macerated whole plant or plant part(s), which depending on the ailment was administered. The information recorded from herbal healers indicates that they possess good knowledge of herbal drugs. Documentation of traditional knowledge of local Vaidyas is very useful for future generation. The collective efforts of ethno botanists, phytochemists, pharmacognostists and pharmacologists are needed to document and evaluate the usefulness and safety of the claim.

## FUTURE PLAN

1. To test the scientific validity of the herbal preparation or drugs.
2. To establish therapeutic property of these preparations for safe and longer use.
3. To develop appropriate management measures for best utilization of natural resource.
4. To study the active principles in the modern drugs.
5. To raise public awareness on the conservation and sustainable uses of these plants.

**Table -1: List of medicinal plants used by local Vaidyas in Gavanal village**

S.No	Scientific Name of the plant	Family	Common name of the plant	Habit / Life form	Part of the plant used	Aliment treated
1	Adhatoda zeylanica Medic.	Acanthaceae	Adulsa	Shrub	Leaves	Cold, cough, asthma
2	Aegle marmelos (Linn.) Corr.	Rutaceae	Bael	Tree	Fruit, stem	Diabetes, amoebic dysentery, diarrhea
3	Allium sativum, (Linn.)	Liliaceae	Garlic	Herb	flakes	Blood pressure, jaundice, epilepsy
4	Aloe barbadensis Mill. Syn. A. vera (Linn.) Burm.f.	Liliaceae	Aloe	herb	Leaves,	Diabetes, skin diseases, piles
5	Argemone mexicana (Linn.)	Papaveraceae	Brahmadanthi,	Herb	Whole plant	Constipation, skin diseases, eye infections
6	Asparagus racemosus Willd.	Liliaceae	Shatavari	Herb	Entire plant	Anemia, Enhance lactation, anemia, fatigue, cough. Leucorrhoea
7	Azadirachta indica. Juss.	Meliaceae	Neem	Tree	leaves	Migraine, Diabetes, skin diseases, irregular menstruation
8	Benincasa hispida Thunb. Cogn.	Cucurbitaceae	ash gourd	Climber	Fruit, seeds	Urinary trouble
9	Berberis arishtata DC.	Berberidaceae	Daruhalad	shrub	Entire	Liver problems, Typhoid, Leucorrhoea
10	Cajanus cajan (Linn.) Millsp.	<u>Fabaceae</u>	Pigeon pea/Cajan pea/Red gram.	shrub	seeds	Burns of all kinds, eye diseases
11	Carica papaya (Linn.)	<u>Caricaceae</u>	Papaya	Small tree	roots	Kidney stones, Jaundice
12	<u>Cinnamomum camphora</u> (Linn.) Nees & Eberm	Lauraceae	Camphor	tree		indigestion, throat infection, cough, bronchitis
13	Cinnamomum zeylanicum Garh.Blume(Breyn)	Lauraceae	Cinnamon	Tree	bark	nose bleeding, cough, indigestion

INTERNATIONAL JOURNAL OF PHYTOTHEAPRY RESEARCH

14	<u>Citrus</u> limon (Linn.) Burm.f.	Rutaceae	Lemon	Small tree	Leaves, fruit	Common cold fever, indigestion
15	Cocos nucifera (Linn.)	Palmae	Coconut	Tree	Fruit	General weakness, Hair loss
16	Coriandrum sativum (Linn.)	<u>Apiaceae</u>	Coriander	Herb	Fruits	Cataract, Fever, , indigestion
17	Cuminum cyminum (Linn.)	<u>Apiaceae</u>	Cumin	Herb	seeds	, indigestion
18	Cynodon dactylon (Linn.) Pers.	Graminae	Grass	Herb	Leaves	vigour
19	<u>Elettaria</u> cardamomum (Linn.) Maton	<u>Zingiberaceae</u>	Cardamom	Herb	seeds	Bleeding from nose, piles
20	Eucalyptus globulus (Lab.)	Myrtaceae	Eucalyptus	Tree	Leaves,	Cold ,congestion of chest,
21	Ficus religiosa (Linn.)	<u>Moraceae</u>	Peepal	Tree	Leaves	Fever
22	Foeniculum vulgare <u>Mill.</u>	<u>Apiaceae</u>	Fennel	Herb	Fruits	improve eyesight,
23	Fumaria officinalis (Linn.)	Fumariaceae	Pitt-papra	Herb	Leaves /roots	Acidity, fever,
24	Gymnema sylvestre <u>R. Br. &amp; S.</u>	<u>Asclepiadaceae</u>	Gudamari	creeper	Leaves,	Diabetes
25	Hydrocotyle javanica, (Linn.)	<u>Apiaceae</u>	Pennywort,	prostrate herb	Entire plant	Mental problems, to increase memory power
26	Luffa acutangula (Linn.) <u>Roxb.</u>	<u>Cucurbitaceae</u>	Ridged gourd	Creeper	Fruit	Hiccups
27	Myristica fragrans, Houtt.	<u>Myristicaceae</u>	Nutmeg and Mace	<u>tree</u>	Fruit and Aril(Mace)	Cholera, diarrhea, enhancing sexual power etc
28	Ocimum basilicum, (Linn.)	Lamiaceae	Sweet basil	Herb	seeds	Piles,
29	Ocimum sanctum (Linn.)	Lamiaceae	Tulsi	Herb	Leaves,	Nose bleeding, skin diseases
30	Oryza sativa (Linn.)	Graminae	Rice	Herb	Grains	Migraine,
31	Phyllanthus emblica (Linn.)	Euphorbiaceae	Goose berry	Tree	fruit	hair loss, hyperacidity, constipation,
32	Piper betle (Linn.)	<u>Piperaceae</u>	Betel pepper	creeper,	leaves	Throat infection, abdominal pain
33	Piper nigrum (Linn.)	<u>Piperaceae,</u>	Black pepper	<u>vine</u>	fruit	Common cold and fever, Migraine

INTERNATIONAL JOURNAL OF PHYTOTHEAPRY RESEARCH

						jaundice,
34	Prunus amygdalus (Mill.) D.A.Webb	<u>Rosaceae</u>	Almond	Tree	Seeds	Anemia,spermatorrhea
35	Plantago ovata <u>Forssk</u>	<u>Plantaginaceae</u>	Isaphgol	Herb	seeds	Body heat, piles
36	Punica granatum (Linn.)	<u>Lythraceae</u>	Pomegranate	<u>shrub</u> or small <u>tree</u>	Fruit/leaves	Diabetes,dysentry,epilepsy
37	Ricinus communis (Linn.)	<u>Euphorbiaceae</u>	Castor	Small Tree	leaves	jaundice, piles,
38	Syzygium aromaticum, (Linn.) <u>syn.</u> Eugenia aromaticum or Eugenia caryophyllata Merrill & Perry	<u>Myrtaceae</u>	Clove	Tree	Flower buds	Dental problems, pain killer, digestive problems
39	Syzygium cumini (Linn.)Skeels.	Myrtaceae	Jambolan	Tree	seeds	Leucorrhoea, Diabetes
40	Terminalia chebula Retz.	Combretaceae	Bal hirada	Tree	Stem/fruit	Indigestion, cough
41	Tinospora cordifolia (Willd.)Miers.	Menispermaceae	Tinospora	Climber	Root and stem	Lactation, body pain, High B.P.
42	Tridax procumbens (Linn.)	Asteraceae	Tridax	Herb	leaves	Kidney stone ,pain, wounds
43	Trigonella foenum- graecum (Linn.)	Fabaceae	Fenugreek	Herb	Seeds	Agalactia,tonic,heart disease,dysentry
44	Withania somnifera (Linn.) Dunal.	Solanaceae	Ashwagandha	Shrub	Entire plant	Blood circulation Tonic, stress, nerves disorder,
45	Zingiber officinale Rosc..	<u>Zingiberaceae</u>	Ginger	Herb	Rhizome	Stomachache,trouble,ac idity,liver problems

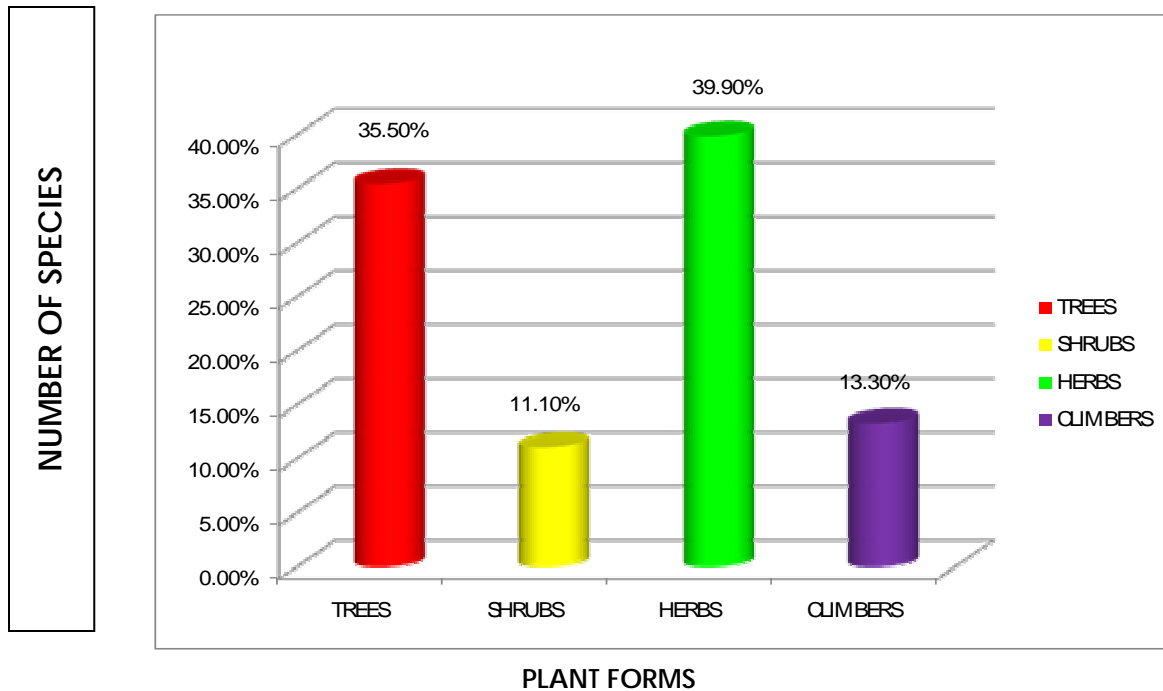


FIG-1 GRAPH SHOWING HABITWISE ANALYSIS OF MEDICINAL PLANT FORMS

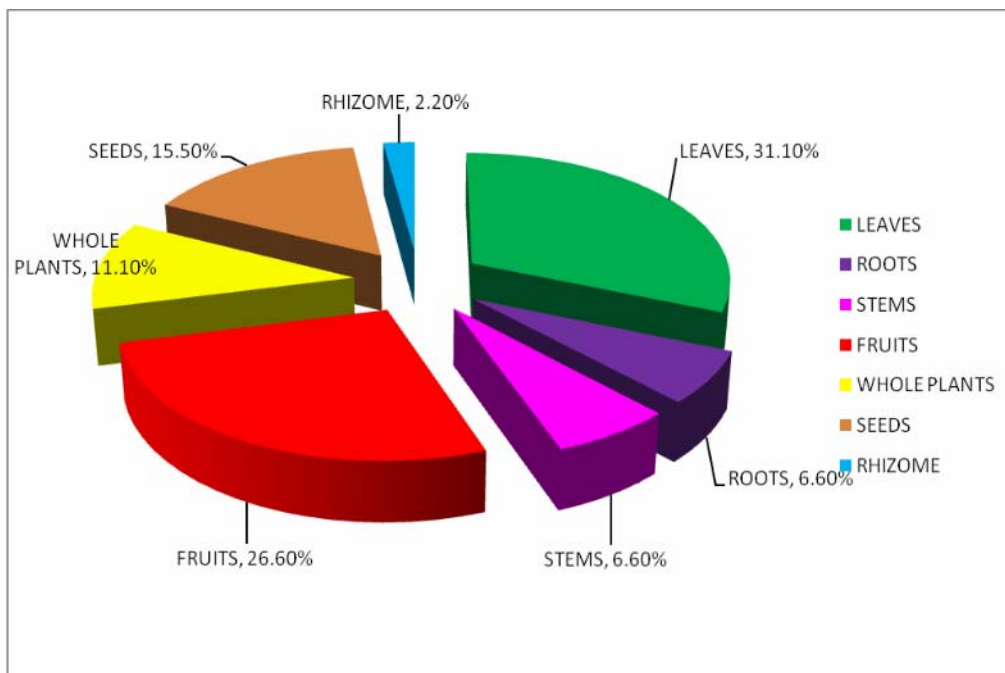


FIG-1 GRAPH SHOWING PLANT PARTWISE ETHANO MEDICINAL USES

## ACKNOWLEDGEMENT

Traditional Vaidya and other local medicine men/women of Gavanal village of Hukkeri Taluk, Belgaum District Karnataka are greatly acknowledged for their cooperation during fieldwork. The author would also like to acknowledge the support from Honorable Chairman of K.L.E.Society Dr. Prabhakar Kore, Members of Board of management for their encouragement, Principals of both Degree and P.U. Colleges of R.L. Sc. Institute Belgaum for providing all necessary facilities and cooperation. Sincere gratitude is also due to Head of the Department of Botany, Teaching staff, office staff and non teaching staff of college.

## REFERENCES

1. Mehrotra, S.and Mehrotra, .N.2005. Role of traditional and folk lore herbals in the development of newdrugs.Ethanoot.17:104-111.
2. Arinathan, V., Mohan, V.R., John De Britto, A., 2003. Ethno medicinal survey among Palliyar tribals of Srivilliputhur Grizzled Giant Squirrel Wildlife Sanctuary, Tamil Nadu. Journal of Economic and Taxonomic Botany 27, 707 710.
3. Vedavathy.S.Tribal medicine-The real alternative .Indian Journal of Traditional Knowledge,Inaugural Issue.1 (1) (2002) 25-31.
4. Pal, D.C., 2000. Ethno botany in India. In: *Flora of India*. Introductory volume -Part II, (Eds.Singh, N.P., Singh, D.K., Hajra, P.K. and Sharma, B.D).

Botanical Survey of India, Calcutta, India. pp. 303 – 320.

5. Mitalaya, K.D.Bhatt, D.C, Patel, N.K. and Didia, S.K. 2003.Herbal remedies used for hair disorders by tribals and rural flok in Gujrat.Indian Journal of Traditional Knowledge 2, 389-392.