



Research Paper

**TRADITIONAL KNOWLEDGE OF MEDICINAL PLANTS TO TREAT
ASTHMA, COLD, COUGH AND HEADACHE AMONG PEOPLES OF
MANDANGAD TAHSIL, RATNAGIRI, MAHARASHTRA**

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Abstract

This research article mainly deals with exploration of traditional knowledge of medicinal plants among the peoples of Mandangad tahsil of Ratnagiri District, Maharashtra (India). This survey showed that 21 species of plants belonging to 14 families were used as traditional medicine by peoples of Mandangad tahsil for curing Asthma, Cold, Cough and Headache. The information was gathered by making group discussion, semi- structured questionnaires and personal interaction with peoples of city area and villages of Mandangad tahsil.

Key words: Inherited knowledge, Medicinal plant, Asthma, Cold, Cough, Headache.

INTRODUCTION

The traditional knowledge about the plant wealth is being inherited from one generation to next as folklore among the people; but now days this knowledge is on the margin of extinction [7]. One of the best thing about medicinal plant is that they don't have any side effects as compared to allopathic medicine as well as they also fulfill the requirements of medicine for growing population [4]. Plant based remedies are believed to be much safer to treat various ailments [5], [3] [2] . Recently, WHO (World Health Organization) estimated that 80 percent of people worldwide rely on herbal medicine for primary health care needs [<https://www.nhp.gov.in>] . In India, about 70 percent of rural population depends on the traditional Ayurvedic system of medicine [6] .Traditional knowledge of medicinal plants deserves high priority, if future generations are benefits from it.

Mandangad tahsil situated in the foot hills of western ghat of Maharashtra therefore large number of high value medicinal plants naturally growing in the nearby forests. That is why despite significant development of rural health services, peoples of study area still uses herbal folk medicines to a good extent for treatment of ailments like Asthma, cough, cold, fever and headache. Till today, traditional knowledge regarding the medicinal plants and its uses is not well documented by the peoples of study area. Hence considering this lacuna this study was conducted to gathered and document the diversity of plant resources that are being used by the peoples of Mandangad tahsil for curing Asthma, Cold, Cough and Headache.

METHODS

This study was performed during year of 2018-19. Ethno-medicinal data was collected based on direct interaction with the peoples of Mandangad by making group discussions, corner meetings and semi-structured interviews.

Plant Identification and confirmation:

Photographs of medicinal plants were taken from the study area with the help of informants. Confirmation and identification of such plants were done by using Google search as well as flora of Sahyadri, flora of Maharashtra and Final report on 'ethnomedicinal plants of western ghats of India' of Indian council of medical research, New Delhi.

Data analysis:

Descriptive statistics using percentages were used to summarize data using Microsoft excel.

RESULT AND DISCUSSION

Main aim of this survey was to exploration of traditional knowledge of medicinal plants among the peoples of Mandangad tahsil of Ratnagiri District, Maharashtra (India). During survey information about medicinal plants and its traditional uses was collected from the total 107 respondents (85 male and 22 female). Demographic structure clearly showed that the age group between 41-60 who have more traditional knowledge as compared to young respondents (**Table No.1**). Due to exposed to modern education

young respondents are not interested in learning and practicing ethnomedicinal wisdom that would perpetuate indigenous knowledge.

The present study revealed that total 21 species belonging 14 families were used by peoples of Mandangad to treat Asthma, Cold, Cough and Headache (**Table No.2 & Table No.4**). As per survey, out of 21 plant species only 13 plants were used to treat Asthma, 12 plants for Cold, 14 plants for Cough and only 7 plants were claims for headache (**Table No.3**). The use of leaves and roots to make herbal medicine preparations followed by rhizome, stem, whole plant, flower, bark and seeds is a common practice. The leaf (21%) and root (31%) are highest utilized parts of these plants whereas, Bark (10%) /Flower (14%) /Whole plant (10%) middling used. Seed (3%) /Rhizome (7%) /Stem (4%) showed negligible utilization (**Fig.No.1**). The documented plants have potential of being used in drug development.

Parameter	Specification	N (%)
Sex	Male	85(79.43%)
	Female	22 (20.56%)
Age	1-20	-
	21-40	39 (36.44)
	41-60	68 (63.55%)
Religion	Islamic	33 (30.84%)
	Hindu	47 (43.92%)
	Buddhist	27 (25.23%)
Nationality	Indian	Total = 107

Table No. 1. Demographic structure of the respondents on the knowledge of Plants used in the treatment of Asthma, Cold, Cough and Headache. where N = Number of Respondents, % = Percentage of Respondents

Plants	Number
Total Plants	21
Total Families	14
Total Genera	20

Table. No.2. Distribution of plants under different forms/habits

Diseases	Claims
Asthma	13
Cold	12
Cough	14
Headache	07

Table. No.3. List of Plants Used to treat Maximum no. of Diseases

Plant Parts Used	Claims
Leaves	06
Stem	01
Root	09
Rhizome	02
Fruit	00
Seed	01
Flower	04
Bark	03
Whole plant	03

Table. No. 5. Plant parts and disease claims

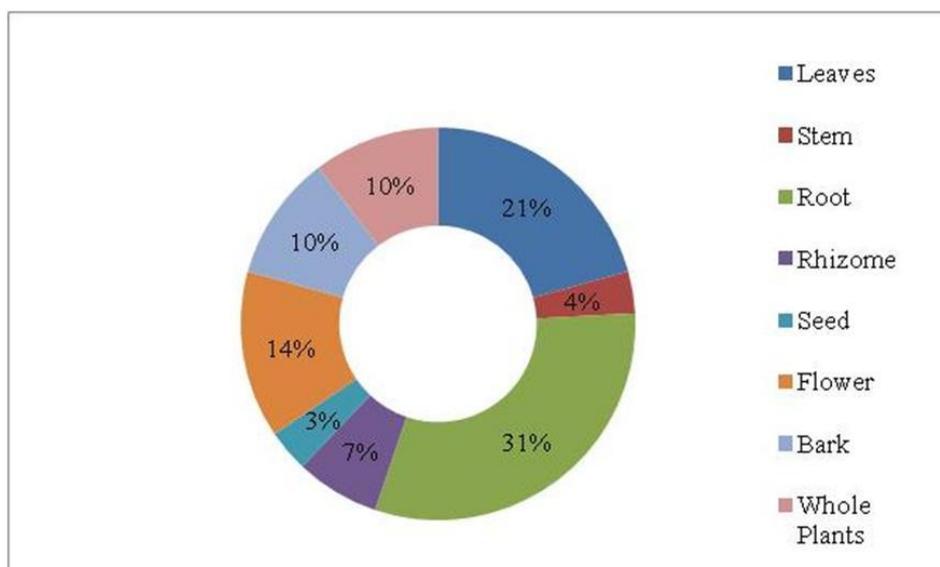


Fig. 1. Plant Parts Used

Sr.No.	Plant Name	Authority	Family	Local Name	Parts used	Disease
1	<i>Alstonia scholaris</i>	(L.) R. Br.	Apocynaceae	Saptaparni	Bark	Asthma
2	<i>Amorphophallus campanulatus</i>	Blume. ex Decue.	Araceae	suran	corm	Asthma
3	<i>Asparagus racemosus</i>	Willd.	Liliaceae	satavari	root	Cough
4	<i>Azadirachta indica</i>	A. Juss.	Meliaceae	Neem, leemb	All part	Cough, Asthma
5	<i>Bauhinia variegata</i>	L.	Fabaceae	Kanchan,kanraj,kavi drash	Leaves ,stem, root	Asthama
6	<i>Biophytum sensitivum</i>	(L.) DC.	Oxalidaceae	Lajwanti, lajalu, zarera	Leaves, root	Asthama
7	<i>Boerhavia diffusa</i>	L.	Nyctaginaceae	Punarnava, ghetoli	Roots,	Asthama
8	<i>Careya arborea</i>	Roxb.	Lecythidaceae	kumbha	Bark, sepals of flowers	Coughs and Cold
9	<i>Calotropis gigantea</i>	(L.) R. Br.	Asclepiadaceae	Rui	Bark, leaves	Asthama,
10	<i>Cassia tora</i>	L. F	Fabaceae	Tarwat	Leaf, roots	Cough
11	<i>Centratherum anthelminticum</i>	(L.) Kuntze.	Asteraceae	Kalazeera	seeds,	Asthma
12	<i>Ceropegia candelabrum</i>	L.	Asclepiadaceae	Kaanvel, kandiful	roots	Headache
13	<i>Chrysanthemum coronarium</i>	L.	Asteraceae	shevanti	flower	Cold
14	<i>Cipadessa baccifera</i>	(Roth.) Miq.	Miq. Meliaceae	kaandvel	Root, bark	Cough and Cold
15	<i>Cleome monophylla</i>	L.	Capparaceae	Nili tilvan	Whole plants	Headache, Cough
16	<i>Clitoria ternatea L</i>	L.	Fabaceae	gokarn	roots	Cough
17	<i>Evolvulus alsinoides</i>	(L.) L.	Convolvulaceae	sankhapuspi	Whole plants	Cold, Cough
18	<i>Lantana camara</i>	L.	Verbenaceae	ghaneri	Leaves, root, flower	Headache, Cough, Cold
19	<i>Lantana indica</i>	Roxb.	Verbenaceae	ghaneri	Leaves, root, flower	Headache, Cough, Cold
20	<i>Curcuma longa</i>	L.	Zingiberaceae	haldi	Fresh and dired Rhizome	Cold, Cough
21	<i>Zingiber officinale</i>	Roscoe	Zingiberaceae	Adruk, Ala	Fresh and dired Rhizome	Cold, Cough

Table No. 4. List of Plants – Asthma, Cold, Cough and Headache

CONCLUSION

People of the Mandangad area mostly still rely on traditional herbal therapies. Keeping in mind the dependence of peoples for their primary health care on such herbal remedies, pharmacological and critical toxicological investigation of certain flora is necessary. Moreover, projects should be designed to analyze the existing issues and problems related with medicinal plants conservation.

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