Ethnomedicinal Plants Diversity of Bhadrawati Tahsil of Chandrapur District, Maharashtra, India

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Abstract- The present study deals with ethnomedicinal plants use by the people of Bhadrawati tahsil of District Chandrapur (M.S.), India. The people from these region with a vast heritage of diverse ethnic culture and rich biodiversity is said to be a great emporium of ethnobotanical health. The use of plants as medicine antedates history. All most all civilization and culture have employed plants in the treatment of human sickness. Bhadrawati is surrounded by dense forest and the people collect the medicinal plant by their traditional knowledge which is used for some common diseases. But due to deforestation, loss of biodiversity and indiscriminate exploitation of wild and natural resources many valuable herbs are at the stage of extinction. The present survey was conducted for documented of traditional knowledge and practices of plants. The present paper enumerates traditional uses of 62 different plant species.

Index Terms- Ethnomedicinal plants, Bhadrawati tahsil, Uses.

I. Introduction

Ethnomedicinal plants, since times immemorial, have been used in virtually all cultures as a source of medicine. The widespread use of herbal remedies and healthcare reparations, as those described in ancient texts such as Vedas and the bible, and obtained from plants has been traced to the occurrence of natural products with medicinal properties. The plants have been the important source of medicines used by man from prehistoric times for relieving suffering and curing ailments. The need for the integration of local indigenous knowledge for a sustainable management and conservation of natural resources received more and more recognition (Posey, 1992). In India, it is reported that traditional healers use 2500 plant species and 100 species of plants serve as regular source of medicine (Pie, 2001).

The quest for documentation of traditional knowledge has been concentrated especially around traditional health practices. In India, many indigenous plants are used in herbal medicine to cure diseases and heal injuries. Tribal people have been in the practice of preserving a rich heritage of information on medicinal plants and their usage. They have both the know-how and do-how for preparing the medicine and its administration. If this information is yet to be collected systematically and comprehensively and maintained in databases in a manner they would help in protecting their knowledge. The objective of this study is to document the traditional medicinal plants used by the peoples of Bhadrawati tahsil of Chandrapur district (M.S.), India.

II. Material and Methods

Bhadrawati is a tahsil place nearly 25 Km North of Chandrapur and 125 Km South East from Nagpur. It is situated at about 211m above the mean sea level and is at 20˚ 06' 35.67" N latitude and 79˚ 07' 7.33" E longitude. Bhadrawati is a historical place over by the sucessors of Wakatak, Gondraja and Raghuji Bhosale from Nagpur. Bhadrawati town has witnessed industrial growth during last decades and now is well known for the Ordanance Factory, Power Grid Corporation of India Ltd., Coal mines, Cement industry, Ceramic industry and many Bricks manufacturing units and Rice mills.

The traditional knowledge about the plants for treating the common diseases was collected from peoples, especially traditional healers and village medicine-men from January 2012 to December 2012. Monthly visit and interviews of local and tribal peoples of villages were carried out for gathering the information about the ethnomedicinal plants and documents their knowledge for future generation.

III. Result and Discussion

The present study was primarily aimed to investigate the plants used by the local and tribal peoples of villages for their medicinal values. During the present investigation 62 different plants species used for a medicinal purposes by local and tribal peoples.

A brief information including botanical name, family, local name, parts used and their medicinal value by the peoples is given in Table No.1. The local people and the tribal villagers are using these plants to cure many diseases like Cough, Diarrhea, Dysentery, Wound healing, Diabetes, Jaundice, Sunstroke, Fever, Vomiting, Skin diseases, Fatigue, Blood purifier, Antipreganancy, Urinogenital disorder, Toothache, Menstrual disorder, Hypertension, Headache etc. They prepare the plant product as decoction, oral treatment, ointment etc. The parts of the plants used for medicinal purposes are root, stem, leaves, fruits or whole plant use as a medicine. The extracts and the paste are the two main methods for treatments of diseases.

The number of researcher work and studied on ethnomedicinal plants in Maharashtra and other states of India by Ahmed and Sinha, (2009); Ahmed and Perween, (2009); Prasad (2009); Borkar and Theng, (2010); Iqbal *et al.*,(2010); Ahir *el al.*, (2011), Borkar *et al.*, (2012); Zingare, (2012); Khonde *et al.*, (2012); Dhore *et al*., (2012); Zingare *et al.*, (2013); Shrirame and Hiwale, (2013); Watile, (2013); Wadekar *et al.*, (2013); Ghoshal and Saoji, (2013); Puranik, (2013); Gond, (2013) and Pocchi, (2013).

The ethnomedicinal plants are under threat due to deforestation, overgrazing and their neckless utilization. It indicates the urgent need of their conservation for sustainable development (Burlakoti and Kunwar, 2008; Kunwar and Dawadee, 2003). The local uses of plants as a cure are common particularly in those areas, which have little or non access to modern health services (Faulk, 1958), such as the innumerable villages and hamlets in India.

Due to commercial harvesting deforestation, uncontrolled grazing the medicinal plant diversity is being largely threatened and many species have come under critically endangered category. With the active support of local and villagers, importance of these economically important plants could be utilized for the benefits of our future generations. It is essential that ethnomedicinal investigation should persistently be carried on and efforts should be made for proper protection, cultivation and conservation of these precious medicinal plants in a large scales so that professional requirements can be fulfilled (Muller, 2003).

Table 1: List of ethnomedicinal plants with their uses.

Sr. No.	Botanical Name with Family	Local Name	Patrs Used	Name of the Disease/Uses
1	*Adathoa vasica* Acanthaceae	Adulsa	Leaves, roots, flowers and stem bark	Cough and cold
2	*Mangifera indica* Anacardiaceae	Amba	Leaves, barks, fruitsand seeds	Diarrhea, Dysentery
3	*Phyllanthus emblica* Euphorbiaceae	Awala	Leaves, fruits and seeds	Vitamin deficiency
4	*Tamarandus indica* Caesalpiniaceae	Chinch	Fruits, seeds and roots	Scorpion bites
5	*Curcuma longa* Zinziberaceae	Haldi	Rhizomes	Antibacterial, Wound healing
6	*Sapindu emarginatus* Sapindaceae	Ritha	Bark, fruits and roots	Healthy hair, Antibacterial
7	*Cassia tora* Fabaceae	Tarota	Leaves	Diabetes
8	*Euphorbia geniculata* Euphorbiaceae	Dudhi	Aerial parts	Jaundice
9	*Tinospora cordifolia* Menispermaceae	Gulvel	Aerial parts	Flue
10	*Aegel marmelos* Rutaceae	Bel	Leaves, root and fruits	Anti-dysentery
11	*Punica granatum* Pinicaceae	Darimb	Fruits and bark	Anti-dysentery
12	*Semicarpus anacardium* Anacardiaceae	Biba	Fruits	Piles, worm
13	*Madhuca indica* Sapotaceae	Moha	Bark, heart-wood, fruits and seeds	Wounds
14	*Tectona grandis* Verbanaceae	Sagwan	Leaves and barks	Snake bite
15	*Butea monosperma* Fabaceae	Palas	Barks, leaves, fruits, seeds and gums	Diabetes
16	*Ficus bengalensis* Moraceae	Wad	Bark, leaves, fruits, seeds and latex	Anti-diabetic, wound
17	*Mimosa pudica* Mimociaceae	Lajalu	Whole plant	Stimulant
18	*Ficus religiosa* Moraceae	Pipal	Bark, leaves, fruits, seeds and latex	Treating skin disease
19	*Azadiracta indica* Meliaceae	Kadunimb	Bark, leaves, flowers and seeds	Antibacterial
20	*Zizyphus sp.* Rhamnaceae	Bor	Fruits	Vit-B
21	*Psidium guajava* Myrataceae	Jam	Leaves, fruits and root	Anti-diarrhea

22	*Terminalia arjuna* Combretaceae	Arjun	Bark	Diuretic, Cardio tonic
23	*Ricinus communis* Euphorbiaceae	Yerandi	Leaves and seeds	Anti swelling
24	*Centella asiatica* Simorouba excelsa	Bramhi	Whole plant	Memory stimulant
25	*Syzigium cumini* Myrataceae	Jambul	Bark, leaves and fruits	Diabetes, Acidity
26	*Murraya koienigii* Ruteaceae	Godnimb	Leaves	Stimulant, Digestive
27	*Acacia nilotica* Fabaceae	Babul	Pods, leaves, bark and gums	Dental use
28	*Ficus racemosa* Moraceae	Umbar	Fruits	Anthelmentic
29	*Annona squamosa* Annonaceae	Shitafal	Leaves, roots, fruits and seeds	Reducing weight
30	*Pongamia pinnata* Fabaceae	Karanj	Leaves, flowers, seeds and bark	Wound healing
31	*Cyanodon dactylon.* Poaceae	Harari	Leaves	Astringent
32	*Dendrocalamus strictus* Gamineae	Bambu	Culms	T.B., Cough
33	*Michelia champaca* Magnoliaceae	Chamapa	Leaves and flowers	Expectorant, Purgative
34	*Alstonea scholaris* Apocyanaceae	Saptparni	Leaves	Snake bite
35	*Pithocellobium dulce* Fabaceae	Vilayati chinch	Fruits	Antioxidant
36	*Vitex nigunda* Verbanaceae	Nirgudi	Flowers and roots	Anti-inflammatory Bone fracture
37	*Bahunia reacemosa* Leguminosae	Apta	Leaves	Wound healer
38	*Tridax procumbems* Asteraceae	Kambarmodi	Leaves	Kraking foot
39	*Feronia limonia* Moraceae	Kawath	Leaves and fruits	Shwet prader
40	*Nyctanthes arboritristis* Oleaceae	Parijat	Leaves, flowers and seeds	Rheumatism
41	*Vinca rosea* Apocynaceae	Sadafuli	Leaves and flowers	Leukemia
42	*Calatrophis procera* Asclepiadaceae	Rui	Whole plant	Cough
43	*Hibiscus cannabinus* Malvaceae	Ambadi	Leaves and fruits	Sunstroke
44	*Allium sativum* Liliaceae	Lasun	Bulbs	Cough
45	*Cymbopogon citrates* Poaceae	Gawti chaha	Whole plant	Cough
46	*Ocimum sanctum* Lamiaceae	Tulas	Whole plant	Fever
47	*Termanilia bellirica* Combretaceae	Behada	Bark and fruits	Vomiting, skin diseases
48	*Trapa natans* Trapaceae	Singada	Fruits	Diarrhea, dysentery, fatigue
49	*Momordica charantia Cucurbitaceae*	Karella	Fruits and seeds	Diabetes, blood purifier and antihelminthic
50	*Aloe vera*	Korphad	Leaves	Abortifacient

	Liliaceae			
51	*Abrus precatorius* Fabaceae	Gunja	Roots	Scorpion bite, skin damage, swelling
52	*Argemone Mexicana* Papaveraceae	Dhatura	Leaves	Body heat
53	*Diospyros melanoxylon* Ebnaceae	Tendu	Fruits	Antipreganancy
54	*Acacia catechu* Mimosaceae	Khair	Pods, leaves, bark and gum	Urinogenital disorder, diarrhea, dysentery, toothache
55	*Catharanthus roseus* Apocynaceae	Jaganthi	Leaves and roots	Diabetics, menstrual disorder, hypertension
56	*Centella asiatica* Apiaceae	Bramhi	Whole plant	Measles, jaundice
57	*Chrysanthemum indicum* Asteraceae	Sevanthi	Flowers	Headache, hypertension
58	*Buchnania lanzan* Anacardiaceae	Char	Fruits	Cough,Skin diseases, Bronchitis,
59	*Diospyrous melanoxylon* Ebenaceae	Tembhurni	Fruits and seeds	Cough, Diabetes, Asthma, Blood purifier
60	*Manilkara hexandra* Rubiaceae	Khirani	Fruits	Arthritis, Blood purifier, Heat burning, Wormicide, Jaundice.
61	*Phoenix sylvestris* Palmae	Sindhi	Fruits	Piles, Arthritis, Headache, Fever, Tonic, Cold flu.
62	*Zizipus oenophelia* Rhamnaceae	Yeruni	Fruits and roots	Anthelmintic, Digestive, Antiseptic, Hyper acidity.

Fig. 1: Photographs of some ethnomedicinal plants in Bhadravati region

Adathoa vasica

Abrus precatorius

Annona squamosa

Termanilia arjuna

Azadirachta indica

Calotropis procera

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