Ethnomedicinal Plants Diversity of Moharli Village of Chandrapur District, Maharashtra, India

N. V. Harney
Department of Zoology, Nilkanthrao Shinde Science and Arts College, Bhadrawati- 442902, Maharashtra, India
narendra_harney2008@rediffmail.com

Abstract:

The World Health Organization (WHO) has estimated that as many as 80% of the world population is dependent on traditional medicine for their primary health needs(Bannerman RH., 1982). People living in the developing countries rely quite effectively on traditional medicine for primary health care. The art of herbal treatment has very deep root in Indian culture used the plants not only for curing diseases but also during several ceremonies. The art of herbal treatment has very deep root in Indian culture used the plants not only for curing diseases but also during several ceremonies (Singh J.S., 2002).

The present study deals with ethnomedicinal plants use by the people of Moharli village 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. Moharli village 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.

Keywords- Ethnomedicinal plants, Moharli village, Uses.

Introduction:

The tribal people depend on forests for their livelihood and most of the rural people still depend on traditional medicine as a primary healthcare source.

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 Moharli village of Chandrapur district (M.S.), India.

Material and Methods:

The Moharli village is located 25 km near Chandrapur district, Maharashtra State, India. It is situtated at about 712 m above MSL and at 20°11115.3911 N latitude and 79°20136.5511 E longitude.

The traditional knowledge about the plants for treating the common diseases was collected from peoples, especially traditional healers and village medicine-men from January 2014 to December 2014. 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.

Result and Discussion:

Tribal people have traditional knowledge of plant species used for different purposes such as food, beverages, colors, resins, gums and medicine. This knowledge was even passed through generation to generation and played an important role in the conservation and sustainable use of biodiversity. They also have knowledge about in situ conservation of numerous plant resources in the form of sacred groves. Plant-based traditional medical systems continue to provide the primary health care to more than three quarters of the world's populace.

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); Harney, N.V. (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 Liliaceae	Korphad	Leaves	Abortifacient
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.

References:

Ahir, R., Pokale, S. and Wagh, S. (2011). Studies on biodiversity of certain medicinal plants of Ahmadnagar region, M.S., India. ISRJ., 1(6): 1-4.

Ahmed, A. and Perween, H. (2009). Study of medicinal plants used in the treatment of Hypertension. Int. J. Mendel., 26(1-4): 47-48.

Ahmed, A. and Sinha, R.R. (2009). Study of some indigenous medicinal plants of Patana used to cure different Gynecological ailments. Int. J. Mendel., 26(1-4): 9-10.

Bannerman RH. (1982) Traditional medicine in modern health care. World Health Forum. 3(1):8–13.

Borkar, L., Borkar, L. and Mate, D.M. (2013). Ethno botanical importance of some plants of Euphorbiaceae in Gadarwara Tehsil (M.P.). J. Sci. Infor., 6: 24-27.

Borkar, S.U. and Theng, P.A. (2010). Traditional uses of Caesalpinia bonducella F. in the treatment of Diabetes in the region of Buldhana tahsil, District Buldhana (M.S.). The Botanique, 14(2): 9-13.

Burlakoti, C. and Kunwar, R.M. (2008). Folk herbal medicine of Mahakali watershed area, Nepal. In: Medicinal plant in Nepal: An anthology of contemporary research. (eds.) Jha, P.K., Karmacharya, S.B., Chhetri, M.K., Thapa, C.B. and Shrestha, B.B. Ecological Society, Kathmandu, Nepal, pp. 187-193.

Dhore, M.M., Dabhadkar, D.D. Zade, V.S. and Dhore, M. (2012). Documentation of fertility regulatory ethnomedicinal plants used by tribals of Yavatmal district, Maharashtra, India. Int. J. Sci. & Res. Pub., 2(3): 1-6.

Faulk, P.J. (1958). An introduction to Ethnobotany (Moredale Publication Ltd. London). pp. 3-5.

Ghoshal, K.P. and Saoji, A.A. (2013). Ethnobotanical survey of some medicinal plants form Gondia district of Maharashtra. J. Sci. Infor., 6: 109-112.

Gond and Gopal. (2013). Ethnobotanical study of plants by the traditional users of Ballarpur and Gondpipari area of Chandrapur district with reference to their conservation. J. Sci. Infor., 6: 186-188.

Harney N.V. (2013) Ethnomedicinal Plants Diversity of Bhadrawati Tahsil of Chandrapur District, Maharashtra, India. IJSRP, Vol.3 (8): 1-6.

Iqbal, M.S., Suradkar, S.S. and Bhadange, D.G. (2010). Some traditional herbals remedies of tribals and rural peoples form the western canopy of Melghat forest area. The Botanique. 14(2): 14-17.

Khonde, V.S., Kaleand, M.C. Badere, R.S. (2012). Ethnomedicinal plants used by Gond/Madia tribes of Aheri tahsil, District Gadchiroli. J. Sci. Infor., 3: 174-177.

Kunwar, R.M. and Dawadee, N.P. (2003). Ethnobotanical notes on flora of Khaptaed National Park, Far-Western Nepal. Him. J. Sci., 1: 25-30.

Muller, W.E. (2003). Current, St. John's Wort. Research form mode actionto clinical efficiency. Pharmacological Research. 47: 101-109.

Pie, S.J. (2001). Ethnomedicinal approaches of traditional medicine studies: some experiences form Asia. Pharmaceuticals Biology. 39: 74-79.

Pocchi, V. (2013). Ethno-veterinary medicinal plants and its conservation status in the Buldhana District. J. Sci. Infor., 6:44-47.

Posey, D. (1992). Traditional Knowledge, Conservation and the Rain Forest Harvest. In: Sustainable Herbest and Marketing of Rain Forest Products, Plotkin, M. and L. Famolare (Eds.). Island Press, Washington DC, pp. 46-50.

Prasad. (2009). Ethnomedicinal plant of Birgunj, Nepal. Int. J. Mendel, 26(1-4): 11-12.
Puranik, S. (2013). Ethnomedicinal plant diversity in the Himalayan region of India. J. Sci. Infor., 6:120-122.

Shrirame, A.M. and Hiwale, S.R. (2013). Ethnomedicinal Survey for Important Plants of Kalmeshwar taluks, District Nagpur. ISRJ. pp. 29-31.

Singh J.S. (2002) The biodiversity crisis: A multifaceted review. Curr Sci ;82(6):638.

Wadekar, M.B., Tondare, M.J. and Rangari, N.U. (2013). Ethnomedicinal plant wealth used for the treatment of the Jaundice by the tribal communities of Chandraur District (MS). J. Sci. Infor. 6:159-164.

Watile, V.J. (2013). Diversity of medicinal plants use by tribes in Kelapur tahsil of Yavatmal district, - A case study. ISRJ. pp. 94-96.
Zingare, A. K., Borkar, K. M. and Jagiya, A.A. (2013). Ethnoveterinary Use of Medicinal Plants from Sakoli Taluka of Bhandara District, M. S. ISRJ. pp. 22-24.

Zingare, A.K. (2012). Ethnomedicinal plant diversity of Sakoli taluka of Bhandara district (M.S.). J. Sci. Infor. 3:58-69.