

Proceedings of National Conference

“Environmental Conservation and Clean India Programme” December 2014, India

Ethno-medicinal plants used by tribes of Junona Village of Chandrapur District (M.S.), India

N.V. Harney

Received: October 07, 2014 | **Accepted:** December 01, 2014 | **Online:** December 31, 2014

Abstract

The present study reports ethnomedicinal plants uses by the tribal people of Junona village of Chandrapur district(M.S.), India. The 69% of people living in Junona village is belongs to tribal community and this village is surrounded by dense forest and the people collect the medicinal plant by their traditional knowledge which are 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 45 different plant species.

Key words- Ethnomedicinal plants | Tribes of Junona |

For correspondence:

Department of Zoology, Nilkanthrao Shinde Science and Arts College, Bhadrawati, Maharashtra, India
Email: narendra_harney2008@rediffmail.com

Introduction

Tribal people have traditional knowledge of plant species used for different purposes such as food, beverages, colours, 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.

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 villagers of Junona of Chandrapur district.

Materials and Method

The village Junona is 12 km away from Chandrapur district and situated on the South side. It is situated at about 677 m above the mean sea level and is at 19° 55' 29.92" N latitude and 79° 23' 35.97" E longitude. The traditional knowledge about the plants for treating the common diseases was collected from tribals and other other peoples, specially traditional healers and village medicine-men from June 2013 to May 2014. Monthly visit and interviews of tribal peoples were carried out for gathering the information about the ethnomedicinal plants and documents their knowledge for future generation.

Results and Discussion

The present study was primarily aimed to investigate the plants used by the tribal peoples of the Junona village for their medicinal

values. During the present investigation 45 different plants species used for a medicinal purposes by tribal peoples.

Medicinal plants have important contributions in the healthcare system of local communities as the main source of medicine for the majority of the rural population. Out of the total 422,000 flowering plants reported from the world, more than 50,000 are used for medicinal purposes. About 60% of the world population and 80% of the population of developing countries rely on traditional medicine. According to Bhat *et al.*, more than 4.5 billion people in the developing world rely on medicinal plants as components of their healthcare. The highest popularity of medicinal plant in rural areas is due to high cost of allopathic drugs and side effects.

A brief information including botanical name, family, local name and parts used by tribal peoples is given in Table No.1. Traditional villagers are using these plants to cure many diseases like Cough, Diarrhoea, 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 by Bannerman R.H.(1982), Sebastin and Bhandari (1984),

S. No.	Botanical Name with Family	Local Name	Parts Used	Name of the Disease/Uses
1	<i>Adathoa vasica</i> Acanthaceae	Adulsa	Leaves, roots, flowers and stem bark	Cough and cold
2	<i>Mangifera indica</i> Anacardiaceae	Amba	Leaves, barks, fruits and seeds	Diarrhea, Dysentery
3	<i>Phyllanthus emblica</i> Euphorbiaceae	Awala	Leaves, fruits and seeds	Vitamin deficiency
4	<i>Tamarandus indica</i> Caesalpiniaceae	Chinch	Fruits, seeds and roots	Scorpion bites
5	<i>Curcuma longa</i> Zinziberaceae	Haldi	Rhizomes	Antibacterial, Wound healing
6	<i>Sapindu emarginatus</i> Sapindaceae	Ritha	Bark, fruits and roots	Healthy hair, Antibacterial
7	<i>Euphorbia geniculata</i> Euphorbiaceae	Dudhi	Aerial parts	Jaundice
8	<i>Tinospora cordifolia</i> Menispermaceae	Gulvel	Aerial parts	Flue
9	<i>Aegel marmelos</i> Rutaceae	Bel	Leaves, root and fruits	Anti-dysentery
10	<i>Semicarpus anacardium</i> Anacardiaceae	Biba	Fruits	Piles, worm
11	<i>Madhuca indica</i> Sapotaceae	Moha	Bark, heart-wood, fruits and seeds	Wounds
12	<i>Butea monosperma</i> Fabaceae	Palas	Barks, leaves, fruits, seeds and gums	Diabetes
13	<i>Ficus bengalensis</i> Moraceae	Wad	Bark, leaves, fruits, seeds and latex	Anti-diabetic, wound
14	<i>Ficus religiosa</i> Moraceae	Pipal	Bark, leaves, fruits, seeds and latex	Treating skin disease
15	<i>Azadiracta indica</i> Meliaceae	Kadunimb	Bark, leaves, flowers and seeds	Antibacterial
16	<i>Zizyphus sp.</i> Rhamnaceae	Bor	Fruits	Vit-B
17	<i>Terminalia arjuna</i> Combretaceae	Arjun	Bark	Diuretic, Cardio tonic
18	<i>Ricinus communis</i> Euphorbiaceae	Yerandi	Leaves and seeds	Anti swelling
19	<i>Centella asiatica</i> Simorouba excelsa	Bramhi	Whole plant	Memory stimulant
20	<i>Murraya koienigii</i> Ruteaceae	Godnimb	Leaves	Stimulant, Digestive
21	<i>Acacia nilotica</i> Fabaceae	Babul	Pods, leaves, bark and gums	Dental use
22	<i>Ficus racemosa</i> Moraceae	Umbar	Fruits	Anthelmentic
23	<i>Dendrocalamus strictus</i> Gramineae	Bambu	Culms	T.B., Cough

24	<i>Vitex nigunda</i> Verbanaceae	Nirgudi	Flowers and roots	Anti-inflammatory Bone fracture
25	<i>Bahunia reacesosa</i> Leguminosae	Apta	Leaves	Wound healer
26	<i>Tridax procumbens</i> Asteraceae	Kambarmodi	Leaves	Kraking foot
27	<i>Feronia limonia</i> Moraceae	Kawath	Leaves and fruits	Shwet prader
28	<i>Vinca rosea</i> Apocynaceae	Sadafuli	Leaves and flowers	Leukemia
29	<i>Calatrophis procera</i> Asclepiadaceae	Rui	Whole plant	Cough
30	<i>Hibiscus cannabinus</i> Malvaceae	Ambadi	Leaves and fruits	Sunstroke
31	<i>Allium sativum</i> Liliaceae	Lasun	Bulbs	cough
32	<i>Cymbopogon citrates</i> Poaceae	Gawti chaha	Whole plant	cough
33	<i>Ocimum sanctum</i> Lamiaceae	Tulas	Whole plant	Fever
34	<i>Termanilia bellirica</i> Combretaceae	Behada	Bark and fruits	Vomiting, skin diseases
35	<i>Momordica charantia</i> Cucurbitaceae	Karella	Fruits and seeds	Diabetes, blood purifier and antihelminthic
36	<i>Aloe vera</i> Liliaceae	Korphad	Leaves	Abortifacient
37	<i>Abrus precatorius</i> Fabaceae	Gunja	Roots	Scorpion bite, skin damage, swelling
38	<i>Argemone Mexicana</i> Papaveraceae	Dhatura	Leaves	Body heat
39	<i>Diospyros melanoxylon</i> Ebnaceae	Tendu	Fruits	Antipreganancy
40	<i>Acacia catechu</i> Mimosaceae	Khair	Pods, leaves, bark and gum	Urinogenital disorder, diarrhea, dysentery, toothache
41	<i>Catharanthus roseus</i> Apocynaceae	Jaganathi	Leaves and roots	Diabetics, menstrual disorder, hypertension
42	<i>Buchnanania lanzan</i> Anacardiaceae	Char	Fruits	Cough, Skin diseases, Bronchitis,
43	<i>Diospyros melanoxylon</i> Ebenaceae	Tembhurni	Fruits and seeds	Cough, Diabetes, Asthma, Blood purifier
44	<i>Manilkara hexandra</i> Rubiaceae	Khirani	Fruits	Arthritis, Blood purifier, Heat burning, Wormicide, Jaundice.
45	<i>Zizipus oenophelia</i> Rhamnaceae	Yeruni	Fruits and roots	Anthelmintic, Digestive, Antiseptic, Hyper acidity.

Table 1: Showing the list of medicinal plants with their uses

Mcorkle (1986), Mathius and Korkle (1989), Pushpagandan (1997), Singh J.S.(2002), Hamilton, A.C.(2004), Wanzala (2005), Jabbar *et al.*, (2005), S. K. Marwat, M. A. Khan, M. Ahmad, M. Zafar, and F. Rehman(2008), Aftab Ahmed and Rita Rani Sinha (2009), Aftab Ahmed and Hena Perween (2009), M. Ahmad, M. A. Khan, U. Rashid, M. Zafar, M. Arshad, and S. Sultana(2009), Borkar, S.U. and P.A.Theng (2010), Mohammed Nafees Iqbal *et. al.*,(2010), Rangnath Ahir *et.al.*, (2011), Mulay *et.al.*, (2012), Zingare, A.K. (2012), Khonde *et.al.*, (2012), Zingare *et.al.*, (2013), Shrirame, A.M. and S.R.Hiwale (2013), Watile, V.J. (2013), Wadekar, M.B. *et.al.*, (2013), Sumedha Puranik (2013), Gond, G. (2013), Patel, L. *et. al.*, (2013), Vanita Pocchi (2013) and Harney, N.V. (2013) and J. Bhat, M. Kumar, and R. Bussmann (2013).

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. With the active support of 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).

Conclusion

The objective of this study is to document the traditional medicinal plants used by the villagers of Junona of Chandrapur district.

References

- Aftab, Ahmed and Hena, Perween (2009): Study of medicinal plants used in the treatment of Hypertension. *Int. J. Mendel*. Vol. 26(1-4): 47-48.
- Aftab, Ahmed and Rita Rani Sinha (2009): Study of some indigenous medicinal plants of Patana used to cure different Gynecological ailments. *Int. J. Mendel*. Vol.26(1-4): 9-10.
- Bannerman, R.H.(1982): Traditional medicine in modern health care. *World Health Forum*. Vol.3(1):8–13.
- Borkar, Lekhram, Borkar Laxmikant and Mate, D.M. (2013) Ethno botanical importance of some plants of Euphorbiaceae in Gadarwara Tehsil (M.P.). *J. Sci. Infor. Special Vol.* (6): 24-27.
- Borkar, S.U. and P.A. Theng (2010): Traditional uses of *Caesalpinia bonducella F.* in the treatment of Diabetes in the region of Buldhana tahsil, District Buldhana (M.S.). *The Botanique*. Vol.14(2): 9-13.
- Faulk, P.J. (1958) An introduction to Ethnobotany (Moredale Publication Ltd. London). pp. 3-5.
- Gond, 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. Special Vol.* (6): 186-188.
- Hamilton, A.C. (2004): Medicinal plants, conservation and livelihoods,” *Biodiversity and Conservation*, Vol. 13(8):1477–1517.
- Harney N.V. (2013): Ethnomedicinal Plants Diversity of Bhadrawati Tahsil of Chandrapur District, Maharashtra, India. *IJSRP*, Vol.3 (8): 1-6.
- J. Bhat, M. Kumar, and R. Bussmann, (2013): “Ecological Status and traditional knowledge of medicinal plants in Kedarnath Wildlife Sanctuary of Garhwal Himalaya, India,” *Journal of Ethnobiology and Ethnomedicie*, Vol. 9, article 1.
- Khonde, V.S., M.C. Kale and R.S. Badere (2012): Ethnomedicinal plants used by Gond/Madia tribes of Aheri tahsil, District Gadchiroli. *J. Sci. Infor. Special Vol.* (3): 174-177.
- M. Ahmad, M. A. Khan, U. Rashid, M. Zafar, M. Arshad, and S. Sultana (2009): “Quality assurance of herbal drug valerian by chemotaxonomic markers,” *African Journal of Biotechnology*, Vol. 8(6):1148–1154.
- Mohammed Nafees Iqbal, S.S. Suradkar and D.G.Bhadange (2010): Some traditional herbals remedies of tribals and rural peoples form the western canopy of Melghat forest area. *The Botanique*. Vol.14(2): 14-17.
- Muller, W.E. (2003): Current, St. John’s Wort. Research form mode actionto clinical efficiency. *Pharmacological Research*. Vol. (47): 101-109.
- Pie, S.J. (2001): Ethnomedicinal approaches of traditional medicine studies: some experiences form Asia. *Pharmaceuticals Biology*. Vol.(39): 74-79.
- Pocchi Vanita (2013): Ethno-veterinary medicinal plants and its conservation status in the Buldhana District. *J. Sci. Infor. Special vol.*(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.
- Puranik Sumedha (2013): Ethnomedicinal plant diversity in the Himalayan region of India. *J. Sci. Infor. Special vol.*(6):120-122.
- Rangnath Ahir, Sunil Pokale and Sudhir Wagh (2011): Studies on biodiversity of certain medicinal plants of Ahmadnagar region, M.S., India. *ISRJ*. Vol. 1(6): 1-4.
- S. K. Marwat, M. A. Khan, M. Ahmad, M. Zafar, and F. Rehman (2008): “Ethnomedicines for treatment of various diseases in D.I. Khan District,” *Sarhad Journal of Agriculture*, Vol. 24, article 2.
- Shrirame, A.M. and S.R.Hiwale (2013): Ethnomedicinal Survey for Important

- Plants of Kalmeshwar taluks, District Nagpur. *ISRJ*. Special volume, pp.29-31.
- Singh J.S. (2002): The biodiversity crisis: A multifaceted review. *Curr. Sci.* Vol. 82(6):638.
- Wadekar, M.B., M.J. Tondare and N.U. Rangari (2013): Ethnomedicinal plant wealth used for the treatment of the *Jaundice* by the tribal communities of Chandaur District (MS). *J. Sci. Infor.* Special vol. (6):159-164.
- Watile, V.J. (2013): Diversity of medicinal plants use by tribes in Kelapur tahsil of Yavatmal district, - A case study. *ISRJ*. Special volume, pp. 94-96.
- Zingare, A.K. (2012): Ethnomedicinal plant diversity of Sakoli taluka of Bhandara district (M.S.). *J. Sci. Infor.* Special vol.(3):58-69.
- Zingare, A. K., Borkar, K. M., and A. A. Jagiya (2013): Ethnoveterinary Use of Medicinal Plants from Sakoli Taluka of Bhandara District, M. S. *ISRJ*. Special volume, pp.22-24.
- WHO: Traditional medicine. <http://www.who.int/mediacentre/factsheets/fs134/en>.