

ETHNOBOTANICAL PLANTS STUDIES USED BY THE COMMUNITIES IN DNYANGANGA WILDLIFE SANCTURY, FOREST AREA OF BULDHANA DISTRICT, M.S., INDIA

M. S. SALVE^{a1} AND A. N. KORPENWAR^b

^aDepartment of Botany, Shri Shivaji Science And Arts College, Chikhali, Buldhana, M. S., India

^bRashtrapita Mahatma Gandhi Arts and Science College, Nagbhid, Chandrapur, M. S., India

ABSTRACT

Ethnobotany is a distinct branch of natural science dealing with various aspects such as medicine, religious, cultural, agriculture instruments, household implements and several other disciplines. The present paper reviews plants used ethnobotanically by the communities in Dnyanganga Wildlife Sanctuary, forest range of Buldhanadistrict, Maharashtra, India. The forest area located in Gavilgadh hills in the north and Ajanta hills in south of the district. Dnyanganga take its name from the river Dnyanganga which flows through it. The Buldhana district is located in the northern part of Maharashtra. The forest covers an area of 1151.83 sq. Km. In the Dnyanganga forest range many villages situated on the bank of river i.e. Botha forest range, Matargaon forest range, Borala range. Dnyanganga forest is divided into Buldhana, Motala and Khamgaon these are the three talukas of district. About 50 plant species were observed during the year 2012-2014 of my research work. Out of these plant species, 30 plants species investigated in our paper. Plant species of these forest areas are documented here with their botanical names, local names, family and their ethnobotanical uses. The species were arranged family wise according to the flora of Maharashtra state.

KEYWORDS : Ethnobotanical, Dnyanganga Wildlife Sanctuary, Buldhana District, Maharashtra

Ethnobotany deals with the study and evaluation of plant-human relations in all phases and the effect of plant environment on human society. Ethnobotany is considered as a branch of ethnobiology. The term "Ethnobotany" was coined by J. W. Harshberger in 1896 to indicate plants used by the aboriginals: From "ethno"-study of people and "botany" study of the plants. Ethnobotany is the study of how people of a particular culture and region make use of indigenous plants. Ethnobotanists explore how plants are used for such things as food, shelter, medicine, clothing, hunting, and religious ceremonies.

Buldhana district is the western most district of the Vidarbha, of Maharashtra State. The administrative headquarters of the district is Buldhana since 1867, about 450 km from Mumbai. The name of this district is derived from the corrupt form Bhil-Thana i.e. the place of Bhils. Buldhanadistrict is bounded on the north by Nimar district of Madhya Pradesh state, on the west by Jalgaon and Aurangabad districts, on the south by Jalna and Parbhani districts and Akola district to the east. The Buldhana district is located in the northern part of Maharashtra. Seventy percent of the population is rural. The main occupations of these people are dairy, farming and agriculture. Buldhanais the district headquarters. The famous salt water Lonar Crater is situated in this district, 90 kms from

here. And, The Rajmata Jijabai's father Lakhuji Jadhav's native place is located at Sindkhed Raja which is important historical place in district also. The major crop of this district is cotton, jawar and groundnut. Several taxonomists and ethnobotanists continued to survey many areas of Maharashtra, Addition to Maharashtra Flora Vol.I (Singh and Karthikeyan, 2000), Flora of Buldhana District (Diwakar and Sharma, 2000); The ethnobotanical and floristic work, were carried out by Earlier the works were carried out an ethnobotanical, medicinal and floristic aspects of plants by a good number of workers.

Study Area

Buldhana district having hilly and forest area near the range of Gavilgadh hills. The district is situated partly in Tapi basin and partly in Godavari basin. The total area of district is 9640 sqkms. The forest covers an area of 1151.83 sq. Km near about 11.92% of the district. The proposed study is carried out in Botha Forest of Dnyanganga Wildlife Sanctuary. There are two lakes within the 205 sq km sanctuary. The district is situated between 19°51' and 21°17' North latitudes and 75°57' and 76°49' East longitudes. The total population according to 2011 census is 2586298. The rural population is 2037398 (78.78%). The average rainfall is 946 mm in district. The rural commonly are Maratha, Kunabi, Rajput and Muslims etc. The adivasi commonly are Bhils, Bhilala, Pardhi, Banjara,

¹Corresponding author

Mahadeokoli, Naykada, Tadavi Bhil and many more. Their principal means of livelihood is agriculture and live stalk. The main crops raised are Maize, Wheat, Chana, Tur and Bajra.

MATERIALS AND METHODS

Extensive field trips were organized during the year 2012-2014 in Dnyanganga Wildlife Sanctuary Forest range. Forest areas and villages of such regions were frequently visited, to collect the information about the forest wealth and uses of plant species were noted. The information was gathered using various techniques such as open and structured interview, and discussion with local informants, such traditional healers and experienced village elders including midwives and by direct observations on the way different plant materials were being collected and used. Plants were identified using relevant scientific literature (Hooker, 1872 1877; Cooke, 1967 (Rpr.); Sharma et al., 1996; Naik 1998; Singh and Karthikeyan, 2000; Singh et al., 2001). Voucher specimens are deposited in the Department of

Botany, ShriShivaji Science and Arts College, Chikhli, Dist. Buldhana (M.S.). Valid scientific name, Local name, Family and ethnomedicinal uses are described.

OBSERVATION AND RESULTS

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 30 different medicinal plants species belonging to 25 families 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 i.e. the skin diseases, scabies, wounds, boils, vomiting, fatigue, blood purifier, antipreganancy, urinogenital disorder, toothache, menstrual disorder, hypertension, cough, diarrhea, dysentery, wound healing, diabetes, jaundice, unstroke, fever, headache etc. are the major diseases in the villages. They prepare the plant product as decoction, oral treatment, ointment etc.

Table 1: List of Ethnomedicinal Plants With Their Uses.

Sr. No.	Botanical Name With Family	Local Name	Used Parts of Plant	Name of Diseases/Uses
1	<i>Aegelmarmelos</i> (Rutaceae)	Bel	Roots, Leaves and Fruits	Anti-dysentary
2	<i>Argemone Mexicana</i> (Papaveraceae)	Dhatura	Leaves	Body Temperature
3	<i>Abrusprecatorius</i> (Fabaceae)	Gunj	Roots	Skin diseases
4	<i>Allium sativum</i> (Liliaceae)	Lasun	Bulbs	Cough
5	<i>Annonasquamosa</i> (Annonaceae)	Sitaphal	Roots, Leaves and Fruits	Weight Reducing
6	<i>Acacia nilotica</i> (Fabaceae)	Babul	Barks, Pods and Gums	Dental disorders
7	<i>Azadiractaindica</i> (Meliaceae)	Kadunimb	Barks, Fruits and Leaves	Bacterial disorders
8	<i>Adathoavasica</i> (Acanthaceae)	Adulasa	Roots, Leaves and Flowers	Cough and Cold
9	<i>Ficusbengalensis</i> (Moraceae)	Vad	Roots	To cure Scabies
10	<i>Jatrophacurcas</i> (Euphorbiaceae)	JungaliErand	Leaves and Fruits	To cure Scabies
11	<i>Hibiscus rosa-sinensis</i> (Malvaceae)	Jaswand	Leaves and Flowers	Hair falling, Boils
12	<i>Mangiferaindica</i> (Anacardiaceae)	Aamba	Fruits and Seeds	Skin raches and Ulcers

SALVE AND KORPENWAR : ETHNOBOTANICAL PLANTS STUDIES USED BY THE COMMUNITIES...

13	<i>Phyllanthusemblica</i> (Euphorbiaceae)	Aawala	Fruits and Leaves	Dental disorders
14	<i>Tamarindusindica</i> (Ceasalpiniaceae)	Chinch	Leaves and Fruits	To cure Scabies
15	<i>Ocimumbasilicum</i> (Lamiaceae)	Ran tulasi	Leaves	To cure ulcers
16	<i>Momordicacharantia</i> (Cucurbitaceae)	Karali	Fruits	Treat on dry skin
17	<i>Ficusreligiosa</i> (Moraceae)	Pimpal	Stem bark	Itches and Scabies
18	<i>Curcuma longa</i> (Zingiberaceae)	Haladi	Rhizome	Skin treatment
19	<i>Celosia argentea</i> (Amaranthaceae)	Kurdu	Seeds	Skin raches and itching
20	<i>Calotropisprocera</i> (Asclepiadaceae)	Ruchki	Latex	Infected skin
21	<i>Syzygiumcumini</i> (Myrtaceae)	Jambhul	Stem barks and Fruits	Skin diseases
22	<i>Aloe vera</i> (Liliaceae)	Korphad	Leaves gel	Piles and Stomache
23	<i>Bombaxceiba</i> (Bombacaceae)	Katshevar	Roots	Pimpal treatments
24	<i>Balanitesaegyptica</i> (Balanitaceae)	Hinganbet	Fruits	Stomache
25	<i>Diospyrosmelanoxyton</i> (Ebenaceae)	Tembhurn	Fruits pulp	Dysentery
26	<i>Terminaliaarjuna</i> (Combretaceae)	Arjun	Barks	Cardio tonic
27	<i>Cymbopogon citrates</i> (Poaceae)	Gavaticaha	Leaves	Cough
28	<i>Termaniliabellirica</i> (Combretaceae)	Behada	Bark and Fruits	Skin disease
29	<i>Madhucaindica</i> (Sapotaceae)	Moh	Fruits, Flowers and Seeds	Wounds
30	<i>Buteamonosperma</i> (Fabaceae)	Palas	Leaves And Barks	Bone fracture

The extracts and the paste are the two main methods for treatments of diseases. The plant parts used for medical preparation were bark, roots, rhizome, leaves and whole plants. In some cases the whole plant including roots was utilized. The forests of Buldhana district are rich in medicinal plants, many are still not known to us. Present investigation indicates that Dnyanganga Wildlife Sanctuary area of Buldhana district is blessed with magnificent diversity of ethno-medicinal plants used to cure many diseases. The present study will give new incentive to the traditional system of healthcare.

DISCUSSION

The information as a outcome of study will serve as a useful tools to botanist, herbal medicinal practitioners, foresters, as well as drug industry in tribal tracts for providing self employment opportunities. Therefore, documentation of these plants is the only way to preserve the traditional knowledge of the plant resources endemic to this area.

ACKNOWLEDGEMENTS

The authors are thankful to the local practitioners and forest officials who provided valuable information on this subject. We are also thankful to the authorities of various herbaria and musea for their help and cooperation extended during the research work. I am also thankful to UGC for financial support.

REFERENCES

- Cooke T., 1967. (Rpr.)The Flora of the Presidency of Bombay.Vol.I, II, III.Botanical Survey of India.Culcutta.
- Diwakar P. G. and Sharma B. D., 2000.“Flora of Buldhana District” B.S.I. Pune.
- Harshberger J. W., 1896. The purpose of Ethnobotany. Bot.Gaz., **21**: 146-158.
- Hooker J. D., 1872-1997. The Flora of British India. Vol.I VII. London.
- Naik V. N., 1998.Marathwadyatil Samanya Vanaushhadhi. (Marathi) Amrut Prakashan, Aurangabad.
- Sharma B. D., Karthikeyan S. and Singh N. P., 1996. Flora of Maharashtra state, Monocotyledones. Botanical Survey of India. Calcutta.
- Singh N. P. and Karthikeyan S., 2000. “Flora of Maharashtra State-Dicotyledones” Vol. I. Botanical Survey of India, Calcutta.
- Singh N. P., Lakshminarasimhan P., Karthikeyan S. and Prasanna P. V., 2001. “Flora of Maharashtra State Dicotyledones” Vol. II. Botanical Survey of India, Calcutta.