



GNITED MINDS
Journals

*Journal of Advances in
Science and Technology*

*Vol. VI, Issue No. XI,
November-2013, ISSN
2230-9659*

**MEDICO-ETHNO BOTANICAL STUDIES OF WILD
PLANT SPECIES FROM THE FLORA OF DISTRICT
BHIWANI (HR)**

AN
INTERNATIONALLY
INDEXED PEER
REVIEWED &
REFEREED JOURNAL

Medico-Ethno botanical Studies of Wild Plant Species from the Flora of District Bhiwani (HR)

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Abstract – Areas of district Bhiwani are dominated by arid and semiarid lands with rich flora of wild plants including herbs, shrubs and trees. The inhabitants of this area have close relationship with wild plant species of their surroundings. In the present research work 13 wild plant species belonging to 13 families have been identified as most commonly used plants for medicinal properties and other day to day activities. Some of these plants are source of food, some are used to cure general ailments while others are used in day to day life activities like fuel wood, agriculture tools etc. In the present study questions were asked from the local inhabitants about the ways of preventing and controlling the general health problems like cough, fever, digestive disorders, sexual problems etc. Majority of the people depends on the allopathic medicines but not in totality. Elder people in general use these plants and have more faith on local herbs than on allopathic medicines. Experimentations and clinical trials are required to exploit the hidden potential of easily available cost effective wild herbs.

INTRODUCTION

Term "Ethnobotany" was coined by J. W. Harshberger in 1895 to indicate plants used by the aboriginals: From "ethno"-study of people and "botany" study of the plants. Ethno botany is considered as a branch of ethno biology. It deals with the study and evaluation of plant-human relations in all phases and the effect of plant environment on human society. Different societies across the world, have standardized different ways of curing and preventing the common ailments and it is observed that all of them are linked with local plants.

Ethno botany is the study of how people of a particular culture and region make use of indigenous plants. Ethno botanists explore how plants are used for such things as food, shelter, medicine, clothing, hunting, and religious ceremonies. The floristic composition of district Bhiwani is unique as it lies at the 'Eco cline' between semi deserts of Rajasthan and canal dominated area of District Hissar and Rohtak. The people of District Bhiwani are mainly dependent on traditional agricultural practices and had rich traditional feeding habits. The food of indigenous people includes Bajra, wheat, gram as staple food. They are fond of eating green, locally available vegetables like Ghea, chenopodium, wild karela, tint etc. So, they are physically healthy and less prone to diseases. Their indigenous knowledge when exploited can help in maintaining good health, prevention and control of diseases and in fulfilling other needs. In this research paper data about the various commonly used plants is collected and analysed for their potential in resolving various health issues and other benefits.

ABOUT THE STUDY AREA

Study area of present study include district Bhiwani of state Haryana in India. The flora of district Bhiwani especially in southern part is not much explored scientifically. The region is dominated by hot and dry habitats with almost no marshes. The soil type is mainly sandy with very high percolation so the density of vegetation is very less.

Bhiwani District came into existence on July 22nd, 1972 and is named after the Administrative city Bhiwani. The District Headquarters is situated in Bhiwani Town. Bhiwani district was carved out of Hissar district.

Bhiwani District is situated between 28° 19 deg. & 29° 05 deg. North Latitude and 75° 26 deg. and 76° 28 deg. longitude. District Bhiwani has an area of 4778 square kilometers & its total population 1425022. Bhiwani has 4th Rank in population & 2nd Rank in terms of area in Haryana. Various towns in district Bhiwani are Charkhi Dadri, Loharu, Bawani Khera, Tosham & Siwani. It bounded by districts of Jhunjhnu of Rajasthan in the west, Hissar District of Haryana in the North & M. Garh District of Haryana in the south & Jhajjar & Rohtak Districts of Haryana in East.

The Bhiwani District is located at distance of 235km South West from capital of Haryana (Chandigarh) & 125km North west from capital of India (Delhi) & 85km North East from Pilani & 256km North East from Jaipur (capital of Rajasthan). District Bhiwani is the representative of semi desert part of Haryana.

Bhiwani is one of the important District of Haryana if viewed from a Political angle Bhiwani town was one of the prime centres of Harappan Culture. The area has been associated with ancient vedic tribes such as Bharatas, Purus, Kurus, Mujavatas Mahavrishas. During medieval times, it went through upheavals and conquests and gained importance for strategic location with regard to Delhi and modern times selected by British in 1817 as a free market site it was incorporated as a munipolity in 1867.

The lands in district bhiwani are having a rich flora of wild plants .these include Tint, Neem, Katili, Bathua, Datura, Satyanasi, Dudhi, Kikkar, Ulta Kanta, Gadumba, Gokhru etc. Some common cultivated plants of this area are Chana,Brassica, Methi, Barley, Bajra, Jawar, Wheat etc. All these plants are are consumed by the local people of district bhiwani for various health benefits associated with them including medicinal values.

METHODOLOGY

The selected area was extensively surveyed during2012-2013 in the villages of district Bhiwani. A questionnaire was made to collect information about the uses of wild plants species of their surroundings. Elderly informants were selected who were familiar with the traditional uses of locally available plants. Some special informants called vaidyas practicing through locally available herbs were also questioned to verify the gathered information. Plants were identified with the already available literature. The plants reported by local informants were actually observed in the field by making field surveys with the informants. The information gathered was analyzed to draw some conclusions.

RESULTS AND DISCUSSION

Results of the survey shows that 13 wild plant species belonging to 13 families are most commonly used by the local inhabitants of the research area. These plants include Bathua, Bhakhri, Arand, Puthkanda, Satyanasi, Neem, Peepal, Tint, Akk, Kikkar, Datura, Gadumba and bhang. Out of these 13 plant species 7 species are hebbs, 3 are shrubs and 3 are trees. The common names ,botanical names ,family ,plant part consumed and their medicinal uses are given in the table 1.On analysis of the data obtained from the respondents it is found that local people utilize local wild plants for their common to specific disorders. For example Chenopodium is a very commonly growing weed of this area. People are consuming this weed in many form .Not much is known about the doses , however, it well known for its health benefits. Gadumba powder (churan) is very commonly used for its medicinal properties like ant constipation agent, Capparis fruits are eaten for its general beneficial effect on digestive system and as anti-diabetic agent. Some specialized people called vaidas use specific plant part in specific doses for the treatment of ailments. It is also observed that one plant may be

used in combination with other plant to obtained desirable results. Generally, fresh parts are used, however, if fresh part is not available, dried parts may also be used. The results need further verification and experimentations. Once the results are verified, these plants will definitely serve as a mean of disease control and general health maintenance.

Table 1.Taxonomic information of wild plants informed by informants of district Bhiwani and their uses

Sr.No	Local Name	Botanical Name	Family	Plant Part Used	Medicinal and other Uses
1	BATHUA	Chenopodium album	Chenopodiaceae	Whole plant	*As saag and as raita for general health *juice of leaves for anaemia and healthy bones
2	BHAKHRI	Tribulus terrestris	Zygophyllaceae	Fruit,whole plant	Errectile dysfunctioning,aphrodisiac
3	ARAND	Ricinus communis	Euphorbiaceae	Seeds	Laxative,purgative,to relieve swelling of gums,prevent abortion.
4	PUTHKANDA	Achyranthes aspera	Amaranthaceae	Leaves,stem branches	Dentalproblems diuretic,purgative,antispasmodic
5	SATYANASI	Argemone maxicana	Papaveraceae	Seeds ,leaves	Eye disorders,Impotency,as antiseptic agent
6	NEEM	Azadirachta indica	Meliaceae	Leaves,stem	Skin problems, blood purifier, dental problems
7	PEEPAL	Ficus religiosa	Moraceae	Leaves,fruit	Topical application of poultice to resolve swelling
8	TINT	Capparis decidua	capparidaceae	fruit	Appetizer, constipation ,diabetes,piles, joint pain
9	AKK	Calotropis procera	Asclepidaceae	Leaves ,latex of stem	Healing of wounds, Abdominal disorders, cough, fever, skin disease
10	KIKKAR	Accacia karro	Fabaceae	Tender stem	Dental problems, sexual disorders of males
11	DATURA	Datura metel	Solanaceae	Leaves,latex,seeds	Cough , male sex problems
12	GADUMBA	Citrullus colocynthis	Cucurbitaceae	fruit	*Laxative,purgative,constipation, termination of pregnancy
13	Bhang	Cannabis sativa	Cannabaceae	Leaves,seeds	*cough,insomnia,depression,diarrhea and dysseenty

CONCLUSIONS

The information gathered from the local people of district Bhiwani regarding the use of wild medicinal plants of this area conclude that they have evolved a system of their own for health maintenance and disease control .When they were talked about the reliability and side effects of the plants consumed, they have no answer .However, the traditional PR actioners are sure about their prescription. They are also aware of the side effects and over doses of the plant part consumed. So the information collected need clinical trials, doses standardizations and phytochemical investigations. This will be a boon to field of health and medicine in a cost effective manner. Further ,due to fast life-styles and easy going life ,the young generation is dependent on allopathic medicines even they are associated adverse side effects. There is an urgent need to preserve and popularize the hidden potential in these wild herbs.

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