



**ETHNO-MEDICINAL STUDY OF PLANTS WITH SPECIAL REFERENCE OF ANTIBACTERIAL ACTIVITY IN
DISTRICT BATHINDA, PUNJAB, INDIA**

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ABSTRACT

In modern days, majority of people are much conscious about the healthcare system. Due to this, need a demand of ethno- botanical knowledge of medicinal plants globally. Ethnobotanical research reveals about the reverse pharmacology in diabetes and bacterial diseases, because most of phyto- constituents are obtained from plant origin sources. However, there is a need to pay an attention about safety, efficacy and conservation of medicinal plants for diabetes and bacterial diseases. Till date, no ethno botanical survey has been established on the area of Bathinda district. Now, this study was carried out to find out the folk flora of medicinal plants of Bathinda district of Punjab. It was carried out through face to face interviews with local healers and peoples. A total of 316 species of medicinal plants were recorded during a botanical survey. Most of plants are used for general health, to treat bacterial diseases.

INTRODUCTION

Herbal medicines have been to be used around the globe; Medicinal plants are of significant remedial aid for various ailments. About 80% of the world population is wholly or partially dependent on drugs derived from plant origin (Rios JL.- 2011). In 2008, global market of traditional medicines was estimated 83 billion US\$. According to WHO report, 25% of modern medicines are derived directly or indirectly from plant origin phyto-medicaments. (Anonymous 2011)

In year 2007, India sales about 1 billion US \$ of herbal medicines and 80 million \$ worth of herbal medicines are exported. Northern India is known for herbal medicines. To fulfill this ambition one has forget to maintain ones health properly. Every person does hard work continuously without giving any proper attention to his or her health so that he gets many diseases. Diseases which are common among the majority of population are bacterial infections. (Kirtikar KR and Basu BD, 1933, Samy RP and Gopalakrishnaakona P, 2007)

The ethnobotanical knowledge has been transmitted orally from generation to generation. In last 20 years, it was disappearing from the society due to replacement by Allopathic medicines. Traditional or folk flora of plants provide idea about new scientific research in reverse pharmacology. Scientific experiments on the antimicrobial properties of plant components were first documented in the late 19th century (Zaika LL.-2007). Any of the drugs currently used to treat bacterial and other infections were first isolated from natural sources including ethnomedicinal plants (Coe FG & Anderson GJ-1996)

MATERIAL AND METHODS

Location of the Study Area

The present research is planned and proposed with the specific purpose to Document, to manipulate, to discover and expiation of ethnobotanical medicinal plants for bacterial diseases of dry, semiarid, little bit desert looking, Bathinda district of Punjab. The average rainfall of the region is 20-40 mm. This region is chiefly occupied by xerophytic vegetations. Bushy, thorny shrubs, thorny, dry, deciduous and tropical desert thorn forests found in the entire region. The total population of the study area is 9,730,327(Census Data, 2011) covering more than 2021 villages spread over in entire district. There are many ethnic groups (communities) occurred in Bathinda district viz. Jat, Rajput, Brahmins, Rors , Gujjar, Punjabi, Baniya, Saini.

Ethnobotanical Survey

The survey was starting in the month of October 2014 to May 2016. Ethnobotanical data were collected in two phases. First phase includes detailed information about the vernacular name; plant parts used and disease treatment with the help of local healers. In the second phase, frequent survey, random interviews and conversation was being taken, between the age group of 45- 80 years .

RESULTS AND DISCUSSION

During the present study, ethno medicinal data In Table 1, data obtained from the field survey has presented. In this study 16 plant species have been recorded. Numerous plant species were used as herbal remedies in ancient time for the treatment of diabetes and various bacterial diseases. Local people and practitioners with traditional knowledge collected these medicinal plants. Most were not involved in the trade of medicinal plants. The local people had a little information about the species and proper time of collection. The survey indicated that the study area has plenty of medicinal plants to treat bacterial ailments.

Table 1:-Shows the Ethno-Medicinal observation of recorded Plants

S.No.	Name	Family	Local Name	Part Used	Used in
1	Acacia catechu.	Fabaceae	Katha	Bark and twig	Dermatitis (Bacterial diseases).
2	Acacia nilotica	Fabaceae	Kika	Twig	Dental bacterial diseases
3	Azadirachta indica	Meliaceae	Neem	Leaf and Twig	Dental bacterial diseases
4	Emblica officinalis	Euphorbiaceae	Amla	Fruit	bacterial diseases of scalp
5	Withania somnifera	Solanaceae	Paneer Dodi	roots leaves	Antibacterial
6	Rosa indica	Rosaceae	Gulab	flower	Antibacterial
7	Ocimum sanctum L.	Lamiaceae	Tulsi	Seed and fruit	Antibacterial
8	Linum usitatissimum	Linaceae	Alsi	Seed oil	Acnes, Skin diseases

9	Allium cepa	Liliaceae	Pyaz	Bulb	Skin bacterial disease
10	Allium sativum	(Liliaceae)	Lahsun	Bulb	Ear drop for bacterial diseases

CONCLUSION

The ethno botanical study of plants reveals about its potential to cure various ailments. The present study may be useful information with regards to its, ethno- pharmacological potential as well as reverse pharmacology of herbal formulations for further research.

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