Medicinal plants of district Bijnor (U.P.) India with special reference to their folk medicinal uses

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ABSTRACT: Present communication deals with the study of medicinal plant of Bijnor district (U.P.), India special reference to their folk medicinal uses.

Key words: Medicinal Plants, traditional knowledge, District Bijnor

Introduction

The man has dependent on nature, particularly on the plants for its substances and survival since his existence on earth. In ancient times, he knew how to relieve his sufferings by using the plants growing around him. The civilizations records show that a number of drugs used today were already in use during ancient times. Its credit goes to Indian Rishies and Physicians who were acquainted with a large number of medicinal plants compared to other countries in the world. In recent years, efforts to record ethnomedical uses of plants from amongst the natives of various countries have received close attention of scientists (Brahman and Saxena, 1989, Jain, 1981, Kathikeyani, 2003, Malkhuri et al., 1998, Pandey et al., 1981, Schultes, 1964, Singh, 1986, Singh et al., 1984, Singh and Khan, 1989, Yadav and Patel, 2001. Yadav et al., 2003). There are numerous medicinal plants in the vegetation of district Bijnor (U.P.) which are used in curing various ailments. The people of this district have deep belief in their native folklore medicine for remedies and they rely on their own herbal cure in contrast to the modern medicine. Since the beginning of civilization, people have used plants as medicine. Perhaps as early as Neanderthal man, plants were believed to have healing powers. A discussion of human on this planet would not be complete without a look at the role of plants. Ethnobotany is the study of how people of a particular culture and region make of use of indigenous plants. Ethnobotanists explore how plants are used for such things as food, shelter, medicine, clothing, hunting, and religious ceremonies. Ethnobotany has its roots in botany, the study of plants. Botany, in turn, originated in part from an interest in finding plants to help fight illness. In fact, medicines and botany have always had close ties. Ethnobotanists are usually botanists and/or biologists with additional graduate training in such areas as archeology, chemistry, ecology, anthropology, linguistics, history, pharmacology, sociology, religion and mythology. First of all, researchers collect detailed knowledge about the local and indigenous people and prepare a regional study on the epidemiology, traditional medicine, culture and ecology of the people and their environment. The interviewing process is conducted very carefully. A translator for the local language is usually necessary to conduct this phase. Ethnobotany as a field is on the rise. Ethnobotany issues are the focus of much public attention. The future looks promising for these dedicated scientists in a fascinating and vital field of research.

This communication documents the traditional knowledge of the medicinal plants that are in use by native people, Hakims, Vaidhyas and Tribes of the district Bijnor.

Materials and Methods

The work was undertaken through field study carried out throughout the seasons of January 2008 to September 2010 in various areas of Bijnor. First hand information about the folk medicinal uses of plants was collected from the traditional healers, Vaidhyas, Hakims, Tribes and older rural people. The age of the respondents ranges between 45 to 80 years and the number of male respondents was higher (70%) as compared to the female respondents (30%). Most of the informants were reluctant to reveal any information but a few consented for collection from the forest and for the interviews. The cultivator of village - Bilai, also revealed many plants used for daily ailments and also agreed for field trips to collect the plant species. The plant samples were collected and processed following the routine method of plant collection and herbarium technique (Jain and Rao, 1977). The specimens have been identified using relevant floras and standard literature (Hooker, 1899, Kanjilal et al., 1982 and Gaur, 1999). The respondents were selected randomly and prior informed consent was obtained from each respondent to get traditional knowledge of the plants.

Results and Discussion

The increasing demand of medicinal plants has resulted in the dwelling of the natural resources mainly for deforestation and other anthropogenic influence. The local uses of plants as a cure are common particularly in those areas, which have little or no access to modern health services. The indigenous traditional knowledge of medicinal plants of various ethnic communities, where it has been transmitted orally for centuries is fast disappearing due to the advent of modern technology and transformation of traditional culture. Therefore, the collection of information about natural flora, classification, management and use of plants by the people holds importance among the ethnobotanists. The present study has resulted in the documentation of 40 medicinal plant species belonging to twenty eight families and thirty seven genera, which have been presented in table 1. Botanical names of medicinal taxa, enumerated alphabetically, followed by families, local names, flowering and fruiting periods and folk medicinal uses.
<table>
<thead>
<tr>
<th>S. No.</th>
<th>Botanical Name</th>
<th>Family</th>
<th>Local Name</th>
<th>Flowering &amp; Fruiting</th>
<th>Folk Medicinal Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Acacia nilotica Delile</td>
<td>Fabaceae (Papilionaceae)</td>
<td>Kikar, Babul</td>
<td>July- December</td>
<td>Bronchitis: Bark of kikar is boiled in water and made into decoction. It is taken twice a day in the dose of 5-6 ml. for a weak to cure bronchitis.</td>
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<tr>
<td>2.</td>
<td>Adhatoda vasica Nees</td>
<td>Acanthaceae</td>
<td>Adusa</td>
<td>December- April</td>
<td>Cough and Cold: A decoction of the bark is given in dose of 20 ml twice a day for 2-3 day.</td>
</tr>
<tr>
<td>3.</td>
<td>Adiantum capillus-veneris Linn.</td>
<td>Adiantaceae</td>
<td>Hansraj</td>
<td>-</td>
<td>Catarrh: Its fronds are pounded with honey and are beneficially used in catarhal affections.</td>
</tr>
<tr>
<td>4.</td>
<td>Albizia lebbeck (Linn.) Benth.</td>
<td>Mimosaceae</td>
<td>Siris</td>
<td>April- September</td>
<td>Sprains: Stem bark paste is applied and bandaged with wet cloth and changed once an hour.</td>
</tr>
<tr>
<td>5.</td>
<td>Alstonia scholaris (Linn.) R. Br.</td>
<td>Apocynaceae</td>
<td>Chhativan</td>
<td>October- March</td>
<td>Tuberculosis, cough and gonorrhoea: Aqueous extract of its bark-latex is used in tuberculosis and</td>
</tr>
</tbody>
</table>
6. Amaranthus spinosus Linn. (Fig 1) Amaranthaceae Kateli Chauli July- December Scabies: Root paste is used as an external application.

7. Andrographis paniculata (Burm.f.) Wall. ex. Nees. Acanthaceae Kiryat October- December Stomachache: Leaf paste in the dose of 10-20 gm is taken twice in a day.

8. Annona squamos Linn. Annonaceae Sharifa May- June Jaundice: Leaf paste is rubbed over the head twice in a week.


10. Calotropis gigantea (Linn.) R. Br. ex Alt. Asclepiadaceae Aak, Madar Almost throughout the year Asthma, colds and coughs: Its flowers in powder form are used in asthma, colds and coughs.

11. Cardiospermum halicacabum Linn. Sapindaceae Kanphuli December- May Rheumatic pains, swellings and tumours: The leaves boiled in castor oil are applied in rheumatic pains, swellings and tumours by the native people.

12. Cassia occidentalis Linn. Caesalpiniaceae Kasondi June- November Bone Fracture: Leaf paste is applied and bandaged.

13. Cissampelos pareira Linn. Menispermaceae Birbsi September - October Diarrhoea: Root powder about 10 gm along with curd is taken twice a day for two days.

14. Cleome gynandra Linn. Cleomaceae Karalia, Hulul August- November Earache (otalgia) and convulsions: The juice of leaves is beneficial in otalgia (earache) and convulsions.

15. Citronematae Linn. Fabaceae (Papilionaceae) Gokarni November-February Chronic Bronchitis: Juice of root in the dose of 5 gm is given in chronic bronchitis.

16. Cocculis grandis (Linn.) Voigt (Fig 3) Curcurbitaceae Kanduri September- December Diabetes: The juice of its leaves and roots is given in diabetes.

17. Cordia dichotoma (Papilionaceae) Ehretiaceae Lassora March-June Dysspepsia and fever: A decoction of its bark is useful in dyspepsia and fever.

18. Cuscuta reflexa Roxb. Cuscutaceae Akashbel October- February Belching and Stomachache: Its seeds are boiled and tied over stomach in belching and in pain of stomach due to digestive problem and gastric troubles.


20. Cynodon dactylon (Linn.) Pers. Gramineae Doobghas Major part of the year Leucorrhea: The paste of fresh roots of Doobghas and Kans (Saccharum spontaneum) in the dose of 5 gm is given with cow milk and sugar early in the morning for one month, to cure leucorrhoea.

21. Daiberia sissou Roxb. (Fig 6) Fabaceae (Papilionaceae) Shisham March- August Dysentery with Blood: In acute dysentery 5-6 green leaves of it are mixed with mint ( Mentha spicata) and given 2 times a day for three days.

22. Datura metale Linn. Solanaceae Dhatura April- August Dandruff: The juice of the fruits is used in dressing for the scalp to check dandruff.

23. Ficus bengalensis Linn. Moraceae Bar, Bargad March- September Spermatorrhoea: A powder of its fruits in shade is prepared, which is taken with honey in the morning and evening for a week in spermatorrhoea.

24. Ficus racemosa Linn. (Fig 7) Moraceae Gular February- July Small pox: The small blister- like ‘galls’ common on the leaves, are soaked in milk and mixed with honey are given to prevent pitting in small pox.

25. Ficus religiosa Linn. Moraceae Pipal March- September Abscess: Thick paste of curd and boiled rice is applied over the dorsal surface of leaf of pipal and is tied over the affected part daily till abscess is cured.

26. Lawsonia inermis Linn. Lythraceae Mehndi June- October Jaundice: The leaf decoction is given in jaundice.

27. Mangifera indica Linn. (Fig 8) Anacardiaceae Aam March- July Diarrhoea: A powder of the tender leaves is given in diarrhoea.

28. Mentha piperita Linn. Lamiaceae Pudina May- June Jaundice: The leaves are used in the treatment of jaundice.

29. Nyctanthes arboria Linn. Oleaceae Harsingar August- January Malarial fever: A decoction of its leaves with black pepper (Piper nigrum), salt and ginger is given thrice daily for three days to cure malarial fever.

30. Ocimum canum Sims. Lamiaceae Van Tulsi November- Migraine: The leaf juice of it and arni ( Clerodendrum inerne) is mixed in equal
Altogether, 36 types of ailments have been reported to be cured by using these 40 medicinal plant species among the populace of this district. Most common diseases among the populace are diarrhoea, dysentery, malarial fever, bronchitis, and jaundice. The phenology of the medicinal plants especially flowering and fruiting time are of great importance as it will either assist a layman to identify the medicinal plants in field in their specific month or forest wild life manager in their efforts for the conservation of the plant wealth in the area.

Conclusion
The study indicates that traditional health care system is an age old practice in this area. This system of ethnic communities is conservation oriented and has great potential. This system needs to be thoroughly studied and documented. Traditional knowledge is transmitted from one generation to another. Study suggests an effective coordination for strengthening medicinal plant sector in Bijnor. This could only be achieved by pooling conservation, biodiversity and health care system together by involving the government, NGO's and research organizations. Collaborative research and integrated efforts are required to preserve the knowledge of indigenous people of traditional healthcare.

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References


