



SOME ETHNOMEDICINAL TREES OF DISTRICT BIJNOR (U.P.) INDIA

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The history of plants and medicine is as old as civilization and origin of human-beings. Plants play a vital role for existence of life on this earth, not only to provide food, shelter to living beings but also to sustain health care. The district Bijnor (U.P.) India is rich in the natural plant wealth, and the present communication documents the folk medicinal uses of forty tree species collected from different areas of the district. The study was done through field observation and consultations with Hakims, Vaidhyas, Tribal and the native people of the area.

Key Words: Ethnomedicinal Trees: Bijnor District

The knowledge of plants and medicines has undergone various stages of evolution till today. Although, various systems of medicine are prevalent in India yet one of Indian systems of medicine i.e. Ayurveda, has attained world wide importance. It has long life security against diseases with no side effects. Developed countries are using the extract of the medicinal plants in allopathic medicine in the form of syrup, capsules, and variously modified forms. The purpose of the present study is to record folk medicinal informations of some important trees provided by local folk medical practitioners for the greater benefit of mankind, especially for the local populace of this area, who is not aware about the therapeutic uses of these trees. Recently ethnobotanical studies have received great attention to record vanishing traditional knowledge on plant utilization. Various aspects of ethnobotanical studies were presented by Jain (1967, 1981, 1991, 2002), Gaur (1999), and Maheshwari (2000) etc. Medicinal importance of some plants adjacent to study area (Bijnor) was reported by Gaur and Sharma (2011), and Gaur *et al.* (2010, 2011). Ethnomedicinal literatures i.e. Gupta and

Chadha 1995, Singh 2000, Dikshit 1999, Mukhopadhyay 1998, Pareek 1996, Vedavathy *et al.* 1997, and Sajem and Nath 2008 have also been consulted.

MATERIALS AND METHODS

Some Vaidhyas (Dig Vijay Singh Ji), Hakim (Inamullah Ji) Tribes (Shankar Ji) and the native rural people (Lakshman Ji) of district Bijnor have been interviewed and accompanied to collect the plant species. During field trips, those plants were collected, which revealed medicinal values by the informers. Following above list of important medicinal trees was prepared. The field visits covered various areas of Bijnor (U.P.) encompassing throughout the seasons. The voucher plant specimens were maintained and identified following Hooker 1872-1897, Duthie 1903-1929, Maheshwari 1963, and Gaur 1999, 2009, etc.

RESULTS AND DISCUSSION

Forty medicinal trees belonging to thirty one families and thirty seven genera have been presented in table 1. The nomenclature of these plants is followed after Gaur (1999). These

IMPORTANT MEDICINAL TREES AMONG
THE PLANTS OF DISTRICT BIJNOR (U.P.) INDIA

PLATE - 1



Fig.1 *Annona squamosa* Linn.



Fig.2 *Artocarpus heterophyllus* Linn.



Fig.3 *Artocarpus lacucha* Buch. - Ham.



Fig.4 *Averrhoa carambola* Linn.



Fig.5 *Bombax ceiba* Linn.



Fig.6 *Crataeva adansonii* DC.



Fig.7 *Grevillea robusta* A. Cunningham ex R. Br.



Fig.8 *Madhuca longilolia* (Koenig) Mac Bride



Fig.9 *Mimusops elengi* Linn.



Fig.10 *Naringi crenulata* (Roxb.) Nicolson



Fig.11 *Phyllanthus emblica* Linn.



Fig.12 *Pterospermum acerifolium* (Linn.) Willd.

S. No	Botanical Name	Family	Local Name	Flowering & Fruiting	Folk Medicinal uses	Distribution in the study area
1.	<i>Acacia catechu</i> (Linn. f.) Willd.	Mimosaceae	Khair, Katha	April-February	The bark is used to cure diarrhoea, dysentery, bronchitis and menstrual disorders.	Common
2.	<i>Acacia farnesiana</i> (Linn.) Willd.	Mimosaceae	Babul, Gandh babul	February-July	The bark is used as effective medicine for gonorrhoea and various plant parts are used in snake-bite, rabies and delirium.	Common
3.	<i>Annona squamosa</i> Linn.	Annonaceae	Sharifa	March-September	The bark is used in skin ailments and seeds are supposed to be abortifacient.	Occasional
4.	<i>Anthocephalus chinensis</i> (Lam.) A. Richard ex Walpers	Rubiaceae	Kadamb	March-September	The bark and leaves are used in fever and skin ailments.	Occasional
5.	<i>Artocarpus heterophyllus</i> Lam.	Moraceae	Kathal	December - July	Three teaspoonful of juice of the ripe fruit with a pinch of black pepper (<i>Piper nigrum</i>) powder and mishri (sugar crystal) is taken to cure loss of appetite.	Cultivated
6.	<i>Artocarpus lacucha</i> Buch.-Ham	Moraceae	Barhal	March-August	Seed paste is applied in conjunctivitis.	Rare
7.	<i>Averrhoa carambola</i> Linn.	Averrhoaceae	Kamrakh	July-December	Fine powder of leaves in the dose of 2gm is taken twice daily for five days to cure chronic fever.	Rare
8.	<i>Bauhinia malabarica</i> Roxb.	Caesalpiniaceae	Amlī, Kachnar	August-March	An infusion of its immature flowers is taken in dysentery.	Cultivated
9.	<i>Bombax ceiba</i> Linn.	Bombacaceae	Semal	January-May	Gum exuded from stem is supposed to be aphrodisiac and is also used to relieve digestive disorders.	Common
10.	<i>Citrus grandis</i> (Linn.) Osbeck	Rutaceae	Chakotra	February-December	Rind of fruit is used to check dysentery.	Cultivated

11.	<i>Crataeva adansonii</i> DC.	Capparaceae	Barne, Barun	March-October	The bark and leaves are used to cure bronchitis, skin and urinary disorders.	Occasional
12.	<i>Eriobotrya japonica</i> (Thunb.) Lindley	Rosaceae	Lokat	November - April	An infusion of its leaves is given in diarrhoea. Fruits are sedative and are used in allaying vomiting and thirst.	Cultivated
13.	<i>Ficus palmata</i> Forsk.	Moraceae	Anjir	May-August	Fruits are taken for digestive disorders.	Occasional
14.	<i>Gmelina arborea</i> Roxb.	Verbenaceae	Gumbhar	March-June	Leaves are used as an antiseptic and flowers are used as blood purifier.	Occasional
15.	<i>Grevillea robusta</i> A. Cunningham-mex R. Br.	Proteaceae	Silver Oak	March-August	Extract of its aerial parts possesses spasmolytic, central nervous system depressant and diuretic properties.	Cultivated
16.	<i>Grewia eriocarpa</i> A. L. Juss	Tiliaceae	Phalsa	May-August	Powder of bark in the dose of 2 gm is given either with milk or with milk cream twice daily for a week to cure spermatorrhoea.	Common
17.	<i>Holarrhena pubescens</i> (Buch.-Ham.) Wallich ex G. Don	Apocynaceae	Kura, Kutaj	April-February	Its bark is used in dysentery.	Common
18.	<i>Holoptelea integrifolia</i> (Roxb.) Planchon	Ulmaceae	Papri	February-May	Leaf-paste is used externally for the treatment of skin diseases like ringworm and itches.	Common
19.	<i>Kigelia africana</i> (Lam.) Benth.	Bignoniaceae	Balamkhira	April-February	The extract of root-bark in water is used to cure gonorrhoea. The bark is used in rheumatism and dysentery.	Common
20.	<i>Lannea coromandalica</i> (Houttuyn) Merrill	Anacardiaceae	Jhinghan	March-August	Gum and bark are given in diarrhoea.	Common
21.	<i>Madhuca longifolia</i> (Koenig) Mac Bride	Sapotaceae	Mahua	April-July	Seeds are ground with water and are used as a collyrium in eye in snake-bitten faint.	Common

22.	<i>Manilkara hexandra</i> (Roxb.) Dubard	Sapotaceae	Khirmi	October-February	A paste of the roots in water is applied externally on forehead in headache and to improve the eye-sight.	Occasional
23.	<i>Michelia champaca</i> Linn.	Magnoliaceae	Champa	April-July	Taking "Sherbet" of two pasted flowers of Champa, twice daily for one or two days removes vomiting tendency caused due to indigestion. The powder of bark in the dose of 500mg with warm water is taken twice daily for three days in headache caused due to common cold and it also regularizes menstrual flow characterized by too little discharge of blood or with no splurge at all.	Cultivated
24.	<i>Mimusops elengi</i> Linn.	Sapotaceae	Maulsari	March-September	Syrup of its fruits in the dose of one teaspoonful is given once daily after food for three weeks to cure spermatorrhoea and the pulp of two to three ripe fruits is taken to cure chronic dysentery.	Common
25.	<i>Naringi crenulata</i> (Roxb.) Nicolson	Rutaceae	Kathbel	March-December	Fruit pulp is taken as an antidote to snake-bite.	Occasional
26.	<i>Pandanus odoratissimus</i> Linn. f. Suppl.	Pandanaceae	Keura	February-August	Juice of inflorescence is taken in rheumatic arthritis.	Rare
27.	<i>Phoenix sylvestris</i> (Linn.) Roxb.	Arecaceae	Khajoor	May-October	A sap exudes out after keeping the roots in water, is given 4-5 teaspoonful to snake-bitten person.	Occasional
28.	<i>Phyllanthus emblica</i> Linn.	Euphorbiaceae	Amala, Anwala	February-November	The powder of dry seeds is taken twice a day for a week to cure leucorrhoea. The juice of bark combined with honey and turmeric is used as a remedy for gonorrhoea.	Occasional
29.	<i>Pinus roxburghii</i> Sargent	Pinaceae	Chir	March-June	Its saw-dust with honey is given in asthma and bronchitis. The oil obtained from the wood mixed with mustard oil is rubbed in rheumatic pain.	Cultivated

30.	<i>Pithecellobium dulce</i> (Roxb.) Benth.	Mimosaceae	Jangli-Jalebi	June-November	The ripe pods and raw seeds are eaten as aphrodisiac and the decoction of its bark is used as astringent in skin-diseases.	Occasional
31.	<i>Pongamia pinnata</i> (Linn.) Pierre	Fabaceae	Danaphal Karanja	March-October	A decoction of its bark is taken in beri-beri disease and seeds are ground into a paste and applied externally on knee and hip joints for rheumatic diseases.	Occasional
32.	<i>Populus ciliata</i> Wallich ex Royle	Salicaceae	Poplar	March-June	Its bark tonic is used as stimulant and to purify blood.	Cultivated
33.	<i>Pterospermum acerifolium</i> (Linn.) Willd.	Sterculiaceae	Kanak-Champa	March-December	Leaf extract is applied to check bleeding of wounds and cuts.	Cultivated
34.	<i>Santalum album</i> Linn.	Santalaceae	Safed-Chandan	June-February	A paste of its wood with water is applied externally on inflamed swellings and skin diseases to allay itching, inflammation and headache.	Cultivated
35.	<i>Sapindus mukorossi</i> Gaertner	Sapindaceae	Reetha	March-December	The fumigations of the fruits are smoked by the people in hysteria melancholia. The fruits are used as a substitute of soap for washing hair and to kill lice.	Rare
36.	<i>Strychnos nux-vomica</i> Linn.	Strychnoaceae	Kuchla	March-February	People macerate bark with lemon juice and made into pills which are taken orally in case of acute diarrhoea.	Cultivated

37.	<i>Tamarindus indica</i> Linn.	Caesalpiniaceae	Imli	Almost throughout the year	Red pulp of the fruit is used as laxative and 'Sherbet' of aged pulp of fruit is taken twice daily for five days to cure chronic dysentery.	Occasional
38.	<i>Terminalia bellirica</i> (Gaertner) Roxb.	Combretaceae	Bahera	April-July	Fruits are used in dyspepsia, coughs and sore throat. Fruits in equal combination of Hed (<i>Terminalia chebula</i>) and Amala (<i>Phyllanthus emblica</i>) form 'triphala' which is used daily for constipation.	Occasional
39.	<i>Terminalia chebula</i> Retz.	Combretaceae	Har, Harara, Hed	April-March	A paste of its fruits is taken orally for abortion, by the tribal women.	Occasional
40.	<i>Toona hexandra</i> (wallich ex Roxb.) M. Roemer	Meliaceae	Toon	March-July	The flowers are emmenagogue and are used in menstrual disorders. Powder of its bark is applied to ulcers.	Common

medicinal trees enumerated alphabetically in their botanical names followed by family, local name, flowering and fruiting period, folk medicinal uses and distribution in the study area.

The study manifested that the trees recorded from the different areas of the district Bijnor are highly valuable for medicinal purpose too. It has been realized that these medicinal trees along other medicinal plants are going to play a vital role for future in social health system. Some of these are widely distributed in the wild whereas others are common cultigens. These plants are not only medicinal but also provides several other resources to manage harmonious environment.

CONCLUSION

The present study revealed that several of the tribal and rural people of Bijnor region depend on crude preparations of medicinal plants for their common ailments. The use of these herbal remedies is not only cost effective but also safe and almost free from serious side effects.

The villages elders, farmers, and tribals have tremendous knowledge about medicinal plants. Through personal request, Inamullah Ji (Hakim) and Lakshman Ji (native of Bijnor) provided me their precious time for field visits and to hand invaluable therapeutic information on plants of the district Bijnor (U.P.) Hence, the need of hour is to retain traditional knowledge on plant wealth. During this study any information regarding the threatened nature of

plants and conservation aspects has not been found.

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