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OBSERVATIONS ON THE ETHNOMEDICINAL PLANTS OF KANNAUJ DISTRICT, UTTAR PRADESH, INDIA

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ABSTRACT

The present study deals with Ethnomedicinal plants of Kannauj district of Uttar Pradesh, India. The rich floristic diversity of district Kannauj has been an important source of natural products with medicinal properties. The villagers of the district use large number of medicinal plant species for treatment of different diseases. But due to deforestation and indiscriminate exploitation of natural resources many valuable plant species are at the verge of extinction. About 60 plants species have been reported in this manuscript which are used for the treatment of various diseases.

Keywords: Ethnomedicinal plants, Traditional medicinal uses, Kannauj, Uttar Pradesh.

INTRODUCTION

Kannauj district covers a total area of 1993 Sq. Km. out of which 80Sq. Km is wetland. Kannauj district is situated between 27°07' North latitude and 79°92' East longitude. It has average elevation of 139 meters above the mean sea level. The district is bounded by the district of Farrukhabad to the North, Hardoi to the North East, Kanpur Nagar to the East, Kanpur Dehat to the South East, Auraiya to the South, Etawah to the South West and Mainpuri to the West. Ganga is the main river at the Northern wetland border of the district. Alluvial soil of the area supports luxurious growth of the flora and fauna. The climate of Kannauj is characterized by the hot summer, pleasant winter and general dryness except during rainy season.

Ethnomedicinal plants, since time immemorial, have been used in many cultures as a source of medicine. The widespread use of herbal medicines has been traced to the occurrence of plant and plant products with medicinal properties. It has been estimated that out of 15,000 higher plants occurring in India, 7,500 are medicinally important. It is reported that traditional healers in India use 2,500 plants species out of which 100 species of plants serve as regular source of medicines.

Usage of plants in medicine had been a long practice by man since ancient times. This practice of using plants in medicine is still prevailing among not only the tribal but also others living in the rural areas. They have both the know how and do how for preparing the medicine and its

administration. But this information is yet to be collected systematically and comprehensively in a manner that would help in protecting their knowledge. The objective of this study is to document the traditional medicinal plants used by the people of Kannauj district of Uttar Pradesh.

MATERIALS AND METHODS

Present study was conducted by making the field trips to many villages of the Kannauj district during January 2018 - December 2020. The information about ethnomedicinal plants, utilization, formulations, conservation and phyto worship practices were gathered by consultation with traditional healers, village medicine man -Vaidyas and old experienced people. The collected plant specimens identified with the help of available herbaria and literature (Roxburgh 1832, Bentham and Hooker 1862-1883, Hooker 1872-1897, Duthie 1903-1929, Gamble 1967, Mabberley 2008). All the specimens are deposited in the department of Botany, Janta Mahavidyalaya, Ajitmal, Auraiya, Uttar Pradesh. Documented ethnomedicinal information of the district also compared with information recorded from other parts of state as well as country (Maheshwari *et al.*, 1981, 1986, Dixit and Pandey 1984, Jain 1991, Khanna 2020, Maliya 2007, Singh *et al.*, 2010, Kumar *et al.*, 2012, Yadav *et al.*, 2014, 2015, 2021, Singh and Ranjan 2021).

Ethnomedicinal plants are arranged alphabetically with their botanical names and family followed by local names, plant part used and medicinal uses are given in the Table 1.

RESULTS AND DISCUSSION

Present investigation finds 60 different plant species being used by the local inhabitants of various villages of district Kannauj for their medicinal value. The local people and the villagers are using these plants to cure many diseases like Cough, Diarrhea, Dysentery, Diabetes, fever, Wound healing, Jaundice, Sunstroke, Skin diseases, Body vigour, Fatigue, Blood purifier, Rheumatism, Piles and Heart disease. The parts of the plants used for medicinal purposes are root, stem, leaves, fruits, seeds or whole plants. The decoction, powder and paste are the main mode of drug administration for treatment of diseases.

CONCLUSION

The majority of plant species belong to families Mimosaceae, Liliaceae, Papaveraceae, Brassicaceae, Apocynaceae, Poaceae, Asteraceae, Euphorbiaceae, Papilionaceae and Myrtaceae. Among these 60 plant species 57 species belong to Dicot and 03 species to Monocots. Due to commercial exploitation, deforestation, urbanization and uncontrolled grazing the diversity of medicinal plants is being largely threatened and many species have come under critically endangered category. With the active support of local inhabitants these economically important plants could be rehabilitated for the benefits of our future generations. For this it is essential that investigation on medicinal plant wealth should persistently be carried on. The efforts should be made for proper protection, cultivation and conservation of these precious medicinal plants on a large scales of that professional requirements can be fulfilled.

Table 1: List of Ethnomedicinal plants of Kannauj district of Uttar Pradesh

S. No.	Botanical name and Family	VernacularName	Plant part used	Medicinal uses
1	<i>Acacia Arabica</i> (Lam) Willd. Mimosaceae	Babul	Fruit and seed	Weakness
2	<i>Achyranthes aspera</i> L. Amaranthaceae	Latzeera	Leaves	Dysentery, Fever and for easy delivery
3	<i>Adhatoda vasica</i> Nees. Acanthaceae	Adulsa	Leaves, roots, flowers and stem bark	Cough and cold
4	<i>Aegle marmelos</i> (L.) Correa Rutaceae	Bel	Stem, Fruit	To keep evil spirit away/laxative
5	<i>Allium cepa</i> L. Liliaceae	Pyaj	Bulb	Sunstroke, Blood purifier
6	<i>Allium sativum</i> Lam. Liliaceae	Lahsun	Leaves, buds	Acidity
7	<i>Aloe vera</i> (L.) Burm.f. Liliaceae	Gwarpatha	Leaves	Heal burn injury
8	<i>Argemone Mexicana</i> L. Papaveraceae	Pili Kateli	Leaves	Wound and healing
9	<i>Azadirachta indica</i> A. Juss. Meliaceae	Neem	Leaves, Bark	Skin disease, toothache, mouthwash
10	<i>Bacopa monnieri</i> (L.) Wettst. Plantaginaceae	Brahmi	Whole plant	To cure cough, Increase memory
11	<i>Bauhinia purpurea</i> (L.) Caesalpinaceae	Kachnar	Fruit	To cure lymph gland
12	<i>Boerhavia diffusa</i> (L.) Nyctaginaceae	Punarnava	Whole plant	Jaundice
13	<i>Brassica rapa</i> L. Brassicaceae	Sarson	Seed	Suffering from evil eyes
14	<i>Butea monosperma</i> (Lam)Taub. Fabaceae	Palas	Barks, leaves, podand seeds	Diabetes
15	<i>Calotropis procera</i> (Aiton) Dryand Apocynaceae	Aak	Latex	To relieve toothache
16	<i>Cannabis sativa</i> L. Cannabaceae	Bhang	Seeds	For cough
17	<i>Cassia fistula</i> L. Caesalpinaceae	Amaltas	Seeds	Skin disease, fever
18	<i>Senna tora</i> (L.)Roxb. Caesalpinaceae	Pawar	Seeds	To cure cough
19	<i>Catheranthes roseus</i> (L.) G. Don. Apocynaceae	Sadabahar	Leaves	Dysentery, Diabetes

20	<i>Centella asiatica</i> (L.) Urban. Apiaceae	Bramhi	Stem, leaves	Memory, Bronchitis, Rheumatism
21	<i>Citrus limon</i> (L.) Osbeck. Rutaceae	Nimboo	Fruit	Acidity, Sunstroke
22	<i>Coriandrum satium</i> L. Apiaceae	Dhania	Fruit, leaves	Diarrhoea
23	<i>Coccinia grandis</i> (L.) Voigt. Cucurbitaceae	Tonglia	Leaves	Acidity, to cure piles
24	<i>Cuscuta reflexa</i> . Roxb. Cuscutaceae	Amarbel	Stem	To remove dandruff and Rheumatism
25	<i>Phyllanthus emblica</i> L. Euphorbiaceae	Ambla	Fruit	Short sightness
26	<i>Ficus benghalensis</i> L. Moraceae	Vargad	Leaves, Latex	Rheumatism, lumbago
27	<i>Ficus racemosa</i> L. Moraceae	Gular	Fruit, Bark	Diabetes, Dyspepsia
28	<i>Ficus religiosa</i> L. Moraceae	Pipal	Fruit, Leaves	Male and Female infertility, wounds
29	<i>Indigofera linnaei</i> Ali Papilionaceae	Leel	Roots	To cure mouth ulcer
30	<i>Jatropha curcus</i> L. Euphorbiaceae	Ratanjyot	Seed, Fruit	Dysentery
31	<i>Jatropha gossypifolia</i> L. Euphorbiaceae	Chandrajyot	Whole plant	Piles, Burn
32	<i>Launaea procumbens</i> (Roxb.) Ramayya and Rajagopal Asteraceae	Bangobhi	Leaves	Fever
33	<i>Lawsonia inermis</i> L. Lythraceae	Mehandi	Leaves	Boils and Burns, Scabies
34	<i>Linum usitatissimum</i> L. Linaceae	Alsi	Flower, Oil	Heart diseases and Skin diseases
35	<i>Luffa cylindrica</i> (L.) Roem Cucurbitaceae	Ghia torai	Leaves	Body swelling
36	<i>Mangifera indica</i> L. Anacardiaceae	Aam	Bark, Seed	Diarrhoea, Cough
37	<i>Morus alba</i> L. Moraceae	Shahtoot	Leaves	Dysentery
38	<i>Muraya koeingii</i> (L.) Spreng. Rutaceae	Meethi neem	Leaves	Stimulant, Digestive
39	<i>Musa paradisiacal</i> L. Musaceae	Kela	Fruit	Dysentery
40	<i>Nyctanthes arbortristis</i> Linn. Oleaceae	Harsingar	Leaves	Fever
41	<i>Ocimum basilicum</i> Linn. Lamiaceae	Bantulsi	Leaves	Respiratory problem, Mosquito repellent
42	<i>Ocimum tenuiflorum</i> L. Lamiaceae	Tulsi	Leaves	Cough, cold and fever
43	<i>Pongamia pinnata</i> (L.) Pierre Fabaceae	Karanj	Leaves, flowers, seed and Bark	Wound healing
44	<i>Psidium guajava</i> L. Myrtaceae	Amrood	Fruit	Jaundice, Acidity, Diabetes
45	<i>Prosopis juliflora</i> (Sw.) DC Mimosaceae	Vilayatibabool	Bark	Leucorrhoea
46	<i>Raphanus sativus</i> L. Brassicaceae	Mooli	Leaves, Root	Acidity
47	<i>Ricinus communis</i> L. Euphorbiaceae	Arandi	Oil	Pneumonia, Body pain
48	<i>Rosa centifolia</i> L. Rosaceae	Gulab	Flower	Eye infection, Syphilis
49	<i>Sapindus marginatus</i> Vahl Sapindaceae	Ritha	Bark, fruit and roots	Healthy hair, Antibacterial

50	<i>Sida cordifolia</i> L. Malvaceae	Kharenti	Root, Leaves	Dysentery
51	<i>Solanum indicum</i> L. Solanaceae	BadiKateri	Fruit, Root	Bronchitis, Leprosy
52	<i>Sonchus asper</i> (L.) Hill. Asteraceae	Gubbi	Leaves	Cuts and Wounds
53	<i>Syzygium cumini</i> (L.) Skeels Myrtaceae	Jamun	Fruit	Diabetes
54	<i>Tectona grandis</i> L.f. Lamiaceae	Sagwan	Leaves and Barks	Snake bite
55	<i>Terminalia arjuna</i> (Roxb. ex DC) Wight & Arn Combretaceae	Arjun	Bark	Heart disease
56	<i>Tinospora sinensis</i> (Lour.) Merr. Menispermaceae	Gurch	Root and stem	Jaundice, Snake bite, Malaria and Dengue
57	<i>Trapa natans</i> L. Trapaceae	Singhada	Fruits	Diarrhoea, Dysentery and Fatigue
58	<i>Tridax procumbans</i> L. Asteraceae	Ekdandi	Leaves	Cuts and Wounds
59	<i>Withania somnifera</i> (L.) Dunal Solanaceae	Aswagandha	Root	Body vigour and Aphrodisiac
60	<i>Ziziphus jujube</i> Mill. Rhamnaceae	Ber	Leaves	Sty of eye

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