

Investigation on Ethnomedicinal Plants of Katarniaghat Wildlife Sanctuary

Abstract

A survey in Katarniaghat Wildlife Sanctuary has been done for documented ethnomedicinal plants. About 71 plants have reported in this manuscript which is used for various diseases. This manuscript is very useful for those who working with herbal plants.

Keywords: Katarniaghat Wildlife Sanctuary, ethanomedical, Aegle marmelos L., Allium cepa

Introduction

India is a veritable emporium of medicinal and aromatic plants. It has been estimated that out of 15,000 higher plants occurring in India, 9,000 are commonly useful, of which 7,500 are medicinal, 3,900 are culturally important, 525 are used for fiber, 400 are for fodder, 300 for pesticide and insecticide, 300 for gum, resin and 100 for incense and perfumes. In terms of the plant materials used for traditional medicine, it is estimated that local communities have used over 7,500 plant species. Indian flora has innumerable medicinal plants, which are collected from forest by the tribal villagers. Many of them are being exported to the developed countries. Since ancient times, humankind depended mainly on the plant kingdom to meet its need for medicine, fragrance and flavors. Indian subcontinent is blessed with most varied and diverse soil and climatic conditions, which are suitable for the growth of almost every plant species. Usage of plants in medicine had been a long practice by man from 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.

Tribals in this area carried out the survey in remote villages of Katarniaghat Wildlife Sanctuary to identify the common and cultivated medicinal plants and their utilization. The entire area, totaling 40009.35 ha., is situated between 28°06' N & 28°24' N latitudes and 81°02'E & 81°19' longitude. The Sanctuary, together with the adjoining 15002.75 ha. of Reserve Forests, which serve as buffer, constitutes one ecological unit. It is one of the few remnants of the rich and diverse tarai ecosystems..

Materials and Method

During the course of exploration and collection, 10 villages of Katarniaghat Wildlife range were surveyed by conducting interviews with local traditional healers who prescribe their herbal formulations and various ethnobotanical aspects i. e. utilization, domestication, conservation and phytoworship practices. The collected plant specimens were deposited in the P.G. department of Botany, Kisan P.G. College Bahraich. Botanical names are arranged alphabetically followed by local names, family, plant part used and medicinal uses are listed in table.



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S. No.	Botanical Name	Local Name	Family	Plant Parts	Medicinal uses
1	<i>Acacia arabica Willd</i>	Babul	Mimosaceae	All five Parts	Weakness
2	<i>Acacia catechu Willd</i>	Kattha	Mimosaceae	Leaves	Wounds, bleeding
3	<i>Achyranthes aspera L.</i>	Latzeera	Amaranthaceae	Leaves	Dysentery , fever, for easy delivery
4	<i>Aegle marmelos L.</i>	bel	Rutaceae	Stem, fruit	To keep evil spirit away
5	<i>Allium cepa.</i>	Pyaj	Liliaceae	Fruit	Sunstroke, blood purifier
6	<i>Allium sativum Lam.</i>	Lahsun	Liliaceae	Leaves,buds	Acidity
7	<i>Argemone maxicana L.</i>	Pili kateli	Papaveraceae	Juice	Wounds
8	<i>Azadirachta indica</i>	Neem	Meliaceae	Leaves,stem	Skin diseases, tooth problem
9	<i>Bacopa monnieri Linn.</i>	Brahmi	Scrophulariaceae	Whole plant	To cure cough, memory
10	<i>Bauhinia purpurea Linn.</i>	Kachnar	Caesalpiniaceae	Fruit	To cure lymph gland
11	<i>Boerhavia diffusa L.</i>	Ssandha	Nectaginaceae	Root	Short-sight nees, Peeliya
12	<i>Brassica compestris L.</i>	Sarson	Brasicaceae	Seed	Suffering from evil eyes
13	<i>Calotropis gigantea L.</i>	Madar	Asclepidaceae	Leaves	Easy Delivery
14	<i>Calotropis procera (ait) r. br</i>	Aak	Asclepidaceae	Latex	To reduse tootache
15	<i>Cannabis sativa Linn.</i>	Bhang	Cannabinaceae	Seeds	For cough
16	<i>Catheranthes roseus (L.) G.Don</i>	Sadhabahar	Apocynaceae	Leaves	Dysentery
17	<i>Centella asiatica L. (Urb.)</i>	Bramhi	Apiaceae	Stem,Leaves	Memory,Bronchitis,rhumatiscsum
18	<i>Citrus limon (chirstm)</i>	Nimboo	Rutaceae	Fruit	Acidity, Sunstroke
19	<i>Cleome viscosa L.</i>	Bhera	Capparidaceae	Leaf	Dyspepsia , jaundice
20	<i>Crotalaria burhia (Buch)</i>	Bhuisan	Fabaceae	Leaves juice	Remove & kidney-stones
21	<i>Coriandrum stivum L.</i>	Dhania	Apiaceae	Fruit, Leaves	Diarrhoea , Dypepsia
22	<i>Coccinia grandis (L.)</i>	Tonglia	Cucurbitaceae	Leaves	To reduce acidity, To cure piles
23	<i>Coccinia grandis (L.)</i>	Vasan	Menispermaceae	Leaves	Jaundice
24	<i>Cuscuta reflexa Lam</i>	Amerbel	Cuscutaceae	Stem	To remove dandruff
25	<i>Cynodan dactylon (L.)</i>	Dood	Poaceae	Leaves	Blood clotting
26	<i>Datura metal L.</i>	Kaladatura	Solanaceae	seeds	Abortion
27	<i>Emblca officianalis Gaertn</i>	Ambla	Euphorbiaceae	Fruit	Short- sight nees
28	<i>Erythrina variegata L.</i>	Pangara	Papilionaceae	Stem, Leaf	Fever, To relieve paint of joints
29	<i>Ficus benghalensis L.</i>	Barged	Moraceae	Leaf, Latex	Rheumatism,Lumbago
30	<i>Ficus glometra Roxb.</i>	Gular	Moraceae	Fruit, Bark	Diabetes, Dyspepsia
31	<i>Ficus religiosa</i>	Papil	Moraceae	Fruit, Leaves	Male & Female fertility,wounds
32	<i>Holoptela integrifolia</i>	Chilbil	Ulmaceae	Bark	Hydroceae
33	<i>Indigofera linneae Ali</i>	Leel	Papilionaceae	Roots	To cure mouth ulcer
34	<i>Jatropha curcus L.</i>	Ratanjyot	Euphorbiaceae	Fruit, Seed	Dysentery
35	<i>Jatropha gossyfolia L.</i>	Chandrijyot	Euphorbiaceae	Whole plant	Piles, Burn
36	<i>Launaea procumbens Roxb.</i>	Bangobhi	Asteraceae	Leaf	Fever
37	<i>Lawsonia inermis L.</i>	Mehandi	Lythraceae	Leaf	Boils and Burns, Scabies
38	<i>Linum usitatissimum L.</i>	Alsi	Lynaceae	Flower, Oil	Heart diseaeses Skin deseases,
39	<i>Luffa cylendriea L.</i>	Ghia	Cucurbitaceae	Leaf	Bodysweling
40	<i>Mangifera idica Linn.</i>	Aam	Anacardiaceae	Bark, Seed	Cough, Diarrhea
41	<i>Melia azedarach L.</i>	Bakin	Meliaceae	Leaf	Anthelmintic, Piles
42	<i>Morus alba L.</i>	Shahtoot	Moraceae	Leaf	Dysentery
43	<i>Musa paradistica L.</i>	Kela	Mosaceae	Fruit	Dysentery
44	<i>Nyctanthes arbortistis</i>	Harsinghar	Oleaceae	Leaf	Fever
45	<i>Ocimum basilicum L.</i>	Buntulsi	Lamiaceae	Stem	Respiratory problem
46	<i>Ocimum sanclum L.</i>	Tulsi	Labiatae	Leave	Cough, Cold
47	<i>Parthenium Hysterospors L.</i>	Gajarghass	Piperaceae	Flower, Leaf	Cold,cuts and Wounds
48	<i>Piper nigrum L.</i>	Kalimirch	Piperaceae	Fruit	Jaundice
49	<i>Psidium guajava L.</i>	Amrood	Myrtaceae	Fruit	Jaundice, Acidity, Diabets
50	<i>Prosopis julifera</i>	Vikayti babool	Mimosaceae	Bark	Leurrhoea
51	<i>Raphanus sativus L.</i>	Mooli	Brassicaceae	Root, Leaf	Acidity

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53	<i>Ricinus communis L.</i>	Arandi	Eophraceae	Oil	Pneumon ia Body Pain
54	<i>Rosa centifolia</i>	Gulab	Rosaceae	Flower	Eye infection, Synphiles
55	<i>Saraca asoca (Rosb.)</i>	Ashok	Caesalpiniaceae	Bark	Leucorrhoea,Anthelminthic , Piles
56	<i>Sida cordifolia L.</i>	Khaente	Malvaceae	Leaf, Root	Dysentery
57	<i>Solanum indicum</i>	Badi Kateri	Solanaceae	Leaf, Root	Bronchitis, Leprosy
58	<i>Sonchus asper (L.) Hil</i>	Gubbi	Compositae	Leaf	cuts & Wounds
59	<i>Syzigium cumini skeel</i>	Jamun	Myrataceae	Fruit	Diabetes
60	<i>Syzigium hyneanum skeels</i>	Kat-jamun	Myrataceae	Bark	Sunstroke
61	<i>Tephrosia purpurea Linn.</i>	sharfunka	Fabaceae	leaves, Juice	Diarrhea, Amoebic
62	<i>Terminalia arjuna Roxb.</i>	Arjun	Combretaceae	Bark	Heart diseases
63	<i>Tinospora cordifolia (Wild)</i>	Gurch	Menispermaceae	Root	jaundice, Snakebite
64	<i>Tribulus Terrestris L.</i>	Chota-gokhuru	Zygophyllaceae	Root, Fruit	Male weakness
65	<i>Tridax Procumbens (L.)</i>	Ekdandi	Asteraceae	Leaf	cuts & Wounds
66	<i>Vitex negundo L.</i>	Nirgudi	Verbenaceae	Root	Swellings
67	<i>Withania somnifera Dunakl</i>	Aswagandha	Solanaceae	Root	Sex diseases
68	<i>Xanthium strumarium L.</i>	Kuthuru	Asteraceae	Leaf, Seeds	Malaria, Chronic conjunctivitis & Inflammation ofeye
69	<i>Zizyphus mauritiana Lamk</i>	Ber	Rhamnaceae	Leaf	Sty of eye

Results and Discussion

Plant species belonging to 62 genera and 69 species of families are being used by most of the local people for the treatment of common diseases. The dose is prepared by using juice, leaf, bark extracts and other parts of the plant. From earlier time's people made use of plants for their basic needs Medicare and livelihood. Some plants used by People are cultivated while others grow in wild conditions. The tribal depends predominantly on plants for food, clothing, medicine, oil, agricultural implements, art and crafts huts and for other requirements. Plant species were also used to prevent abortion, achieve easy delivery, eye, gastric and respiratory problems, fever, antidote for Snake and scorpion bites, sunstroke, arthritis, hydroceal, toothache, cough, dysentery, jaundice and sexual power.

Conclusion

Majority of plant species belong to families Mimosaceae, Liliaceae, Papaveraceae, brassicaceae, Apocynaceae, Poaceae, Asteraceae, Euphorbiaceae, Papilionaceae and Myrtaceae. Among these 66 plant species belong to Dicot and 03 to Monocots. Out of which 43.66% are tree, 22.54% shrubs, 29.58% herbs and 2.47% creepers. The percentage of plant parts used is as follows-Fruit=22.54%, Leaves=45.075%, Root=12.68%, Bark=11.27%, Seed=8.45%, Stem=8.45%, Whole plant=4.23%, Flowers=4.23%, Bud=1.41%, juice=5.63%, latex=2.82%, Oil=2.82%. The percentage study adds to the earlier knowledge regarding use of plants in the treatment of common diseases.

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