



Species Diversity and Ethno Medicinal Importance of Certain Wild Plants of District Jaunpur, Uttar Pradesh

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Abstract

Jaunpur an Eastern district of Uttar Pradesh is situated between 25° 24' and 26° 12' North latitude and 87°7' and 83° 5' East longitude. Total area of district is 4038 km square. Gomti and Sai are important rivers. Area is intercepted by many perennial lakes and rivers. District is characterized by typical monsoon type of climate. Annual average rainfall is 987 mm. The present study was carried to collect wild plants of entire area at regular interval. Phytosociological characters, ecological notes and ethno medicinal importance was recorded by local in habitats during field survey. Total 71 species belonging to 42 families have been recorded. Family convolvulaceae having six species where prominently observed.while family Asclepiadaceae, Poaceae, Asteraceae, and Polygonaceae was represented by four species in each. Family Solanaceae, Apocynaceae, Menispermaceae, Amaranthaceae, and Verbenaceae have, three species in each. The bark, leaves, fruits of *Azadirachta Indica* is used as antiseptic, ulcers and wounds. *Tinospora* have multiple ethnobotanical importance, locally known as "Guruch". *Vallisneria* and *Ventilago* are usually used in skin problem.

Keywords-*Diversity, Climbers, Ethnobotany, Medicinal Plant.*

Introduction

Jaunpur and Eastern district of Uttar Pradesh is situated between 25 degree 24 minute and 26 degree 12 minute North latitude and 82 degrees 7 minute and 83 degree 5 minute longitude. Total area of district is 438 km square. Gomti and Sai are important rivers. Besides these Varuna, pili, Basuhi, are other smaller rivers. Area is intercepted by many perennial lakes. District is characterized by typical monsoon type of climate, annual average rainfall is 987 mm. The topography of the district is a flat plain with five small rivers and lakes. The rivers flow from Northwest to southeast,. Minerals deposits are rare. Jaunpur ranks first in sex ratio and seventh in term of population.

The angiosperms are seed bearing plants well adapted to the terrestrial life and they occur in diverse habitats like cold tundra to hot tropical and dry desert areas. They also grow well in aquatic habitats. These plant represented

by trees, shrubs, and herbs, and are either dicots Or monocots. The plants is well differentiated in root, stem and leaves. Angiosperms have highly developed vascular tissue system with vessels in xylem and companion cells in the phloem. Flowers in the angiosperms represent specialised sporophylls found in gymnosperm where the stamens can be equated with microsporophylls, carpels with the megasporophylls. Transfer of pollen grains from stamens to carpels is called pollination. It is facilitated by wind, water, birds, insects, and other animals including man. The seeds in angiosperms after fertilisation remain enclosed in ovary which develops into a fruits. These are dominant green flowering plants of present day vegetation. The climbers are those stems which attach themselves to nearby objects by means of some special device called hooks tendrils etc. The present study was to carry and collect the plants of entire area at regular interval. characters, ecological notes, and ethno medicinal importance was recorded by local inhabitants during field survey.

Materials and methods

extensive survey work was carried out a number of medicinal plant having experienced utilise these plants were consulted during trips observation on morphological and ethano Botanical importance was recorded recorded, Regular trips were made during different seasons like winter, summer and rainy so as to collect the plants in various parts of the area and in different habitats. Morphological characters were taken in consideration during various fields trips. Local names and it's medicinal uses of plants were also collected from local inhabitants. After collection immediately the specimens were numbered in field diary and placed inside polythene bags. Collected plants were temporarily pressed in portable plant press. Plants were brought to the laboratory to the department of Botany TDPG college Jaunpur where identified with the help of relevant floras, result and discussion, the tabular chart was prepared on the basis of direct interviews and discussions with native medicine men and interest persons in ayurvedic medicines in the district. In lab critical observations were made with the help of dissecting microscope and noted. After that plants were pasted and poisoned on herbarium sheets. Plants were identified with the help of floras and monographs, (Hooker, 1872-97; Duthei 1960; Haines, rep. Ed. 1961; Raizada 1976). Doubtful and unidentified plants were identified in the herbarium of Botanical survey of India, Prayagraj. and FRI, Dehradun.

Jaunpur is very rich in plant diversity. In remote part of the district people were found widely adopting herbal medicine in their routine life. herbal drugs are being used in cure of cold, cough, fever, pain, diarrhoea, dysentery, malaria, Indigestion, piles etc by rural people on large scale in district Jaunpur.

Result and Discussion

Table:- List of ethno medicinal plants and their uses

1.- *Abutilon indicum* Linn. Family (Malvaceae) -

Ethano medicinal use :- Roots, leaves and seeds of the plant are used in rheumatic pain and leucoderma.

2.- *Achyranthes aspera* Linn. Family (Amaranthaceae) -

Ethno medicinal use :- Roots of the plant are used as antidote and in leucoderma.

3.-*Adhatodavasaka* Nees. Family (Acanthaceae) -

Ethno medicinal uses :- The leaves of the plant are used in cough and bronchitis.

4.-*Aeglemarmelos* Linn. Family (Rutaceae)

Ethno medicinal uses :- The fruits of the plant are used in diarrhea and dysentery.

5.- *Ageratum conyzoides* Linn. Family (Asteraceae)

Ethno medicinal uses:- The leaf of the plant is used as antiseptic, in cuts and wounds.

6.- *Allamanda cathartica* Linn. Family (Apocynaceae)

Ethno medicinal use :- The leaves and stem bark of plant are used in the treatment of Cathartic, colic or Diabetes. It is used as diuretic.

7.-*Alternanthera sessilis*. Family (Amaranthaceae)

Ethano medicinal uses:- The whole plant is used as tonic and in fever.

8.-*Amaranthus spinosus* Linn. Family (Amaranthaceae)

Ethano medicinal uses:- The root of the plant is used in killing intestinal worms.

9.-*Anagallis arvensis* Linn. Family (Primulaceae)

Ethano medicinal uses:- The Leaves of the plant ii leeches in nostrils.

10.-*Argemonemexicana* Linn. Family (Papaveraceae)

Ethano medicinal uses:- The stem of the plant is used in the treatment of Dropsy and Tuberculosis.

11.-*Argeria nervosa* (Burm.f.) Baj. Family (Convolvulaceae)

Ethno medicinal use:- The leaves extract has high Anti Diabetic potential and antibacterial activity with standard antibiotics.

12.-*Arundodonax* Linn. Family (Poaceae)

Ethano medicinal use :-The leaves of the plant is used to cure dispepsia in animals.

13.-*Azadirachta indica* A. Juss. Family (Meliaceae)

Ethno medicinal use :- The bark, Leaves, and fruits are used as antiseptic, in ulcers and cure wounds.

14.-*Bacopamonnieri*. Linn. Family (Schrophulariaceae)

Ethno medicinal use:- The whole plant is used to cure poor production of milk in cow.

15.-*Biophytumsensitivum*. Linn. Family (Oxalidaceae)

Ethno medicinal use :- The exact of leaf are used in cuts, Insanity Filaria, Hydrocoel.

16.-*Blumealacera*Burm. F.D.C. Family (Asteraceae)

Ethno medicinal use :--leaf extract are used in cuts.

17.-*Boerhaaviadiffussa* Linn. Family (Nyctaginaceae)

Ethno medicinal use :- Whole plant part is used in treatment of Jaundice, Weakness, and Asthma.

18.- *Bombax ceiba* Linn. Family (Bombacaceae)

Ethno medicinal use:- Roots are used as stimulant and given in impotency.

19.-*Bougainvillea spectabilis* Wild. Family (Nyctaginaceae)

Ethno medicinal use :- The decoction of leaves is used as antimicrobial and antibacterial activity. To cure diarrhea, cough, and sore throat.

20.- *Campsis grandiflora* K. Schum. Family (Bignoniaceae) .

Ethno medicinal use :- A decoction of the flower is used to correct menstrual disorder rheumatoid pains., traumatic injuries, difficult urination, pruritis etc.

21.-*Calotropisprocera* Rx. Br. Family (Asclepiadaceae)

Ethno medicinal use:-The extract of roots are used in the treatment of Dysentery.

22.-*Cassia occidentalis* Linn. Family (Caesalpinaceae)

Ethno medicinal use:- Seed, twig, and leaf of plant are used to cure skin disease and ear aches.

23.-*Cassia tora* Linn. Family (Caesalpinaceae)

Ethno medicinal use:--leaf and seed of the plant are used to cure itches and ring worm.

24.-*Ceratophyllumdemersum* Linn. Family (Ceratophyllaceae)

Ethno medicinal use:--Leaf extract are used in the treatment of diarrhoea in animals.

25.-*Chenopodiumambrosoides* Linn. Family (Chenopodiaceae)

Ethno medicinal use:--Leaf extract of plant are used to kill intestinal worms in animals.

26.-*Cissus quadrangularis* Linn. Family (Vitaceae)

Ethno medicinal use:--All parts of the plant are used for obesity, diabetics upset stomach, hemorrhoids painful menstrual periods, asthma malaria and pain.

27.-*Clerodendrum viscosum* Vent. Family (Verbenaceae)

Ethno medicinal use:--Leaf extract of the plant are used in the treatment of skin diseases and hair loss.

28.-*Cocculushirsutus* Diels. Family (Menispermaceae)

Ethno medicinal use:- Roots is bitter and used as alternative, laxative, demulcent diuretic,.

29.-*Colocasia esculenta* Linn. Family (Araceae)

Ethno medicinal use:--Leaf are used to treat Estrus in animals.

30.-*Commelinabenghalensis* Linn. Family (Commelinaceae)

Ethno medicinal use:- Leaves are used in the treatment of sores.

31.-*Conscora decussate* Roxb. Roem. And Schult. Family (Gentianaceae)

Ethno medicinal use :--Whole plant parts are used as brain tonic.

32.-*Cryptolepis burchanani* Roem. Family (Asclepiadaceae)

Ethno medicinal use:- The roots, stems and leaves are used in the treatment of bone fracture .

33.-*Cuscuta reflexa* Roxb. Family (Convolvulaceae)

Ethno medicinal use:--Whole plant part is used to cure skin disease

34.-*Cynodondactylon* L. Pers. Family (Poaceae)

Ethno medicinal use:- Whole plant extract is used to cure wounds epistaxis and cuts.

35.-*Cyperus rotundus* Linn. Family (Cyperaceae)

Ethno medicinal use:- Tuber of the plant is used in the treatment of fever.

36.-*Cyperus triceps* Rottb. Endl. Family (Cyperaceae)

Ethno medicinal use:-Tuber of the plant is used to cure fever and skin diseases.



37.-*DalbergiasissooRoxb.* Family (Fabaceae)

Ethno medicinal use:- Leaf extract is used to cure Gonorrhoea.

38.-*DregeavolubilisBenth.* Family (Asclepiadaceae)

Ethno medicinal use:- paste made from leaves is combined with pepper to treat dyspepsia, rheumatoid pain, cough, fevers and severe cold.

39.-*Eichhorniacarsipes Mart.* Family (Pontederiaceae)

Ethno medicinal use:- Flower and leaf extract are used to cure poor milk in cattle.

40.- *Eclipta prostrate Linn.* Family (Asteraceae)

Ethno medicinal use:- Leaf extract are used to treat fever, hair tonic, and wound.

41.-*Elephantopusscaber Linn.* Family (Asteraceae)

Ethno medicinal use:- Roots extract are used in the treatment of hydrocoel.

42.-*Euphorbia hirta Linn.* Family (Euphorbiaceae)

Ethno medicinal use :- Whole plant parts are used to cure skin diseases.

43.-*Euphorbia thymifolia Linn.* Family (Euphorbiaceae)

Ethno medicinal use:--Whole plant part extract are used to cure Spermatorrohea.

44.-*Evolvulusalsinoides Linn.* Family (Convolvulaceae)

Ethno medicinal use:- Leaf extract are used in cuts and tonic.

45.-*Ficus religiosa Linn.* Family (Moraceae)

Ethno medicinal use :- Bark extract are used in the treatment of Gonorrhoea.

46.-*Heliotropiumindicum Linn.* Family (Boraginaceae)

Ethno medicinal use:- Root extract is used in scorpion sting

47.-*Hyptissuaveolens Linn.* Point. Family (Lamiaceae)

Ethno medicinal use :- Root extract are used in urine trouble.

48.-*Ichnocarpus frutescens* Linn. Ait. Family (Apocynaceae)

Ethno medicinal use :- Leaves are boiled in oil and applied to headaches, fevers and wounds between the fingers. Seeds to cure rheumatism.

49.- *Indigoferaliniifolia* L. f. Retz. Family (Fabaceae)

Ethno medicinal use :- Leaf extract are used in cuts.

50.-*Ipomoea cairica* Linn. Sweet. Family (Convolvulaceae)

Ethno medicinal use :- Leaf extract are used to treat body rashes.

51.-*Ipomoea fistulosa* Mart. Family (Convolvulaceae)

Ethno medicinal use :- Leaf extract are used in swellings and bone injuries.

52.-*Lantana camara* Linn. Family (Verbenaceae)

Ethno medicinal use :- Twig extract are used to treat toothache.

53.-*Ludwigia octovalvis* Jacq. Raven. Family (Onagraceae)

Ethno medicinal use:- Whole plant part extract are used as tonic.

54.-*Mimosa pudica* Linn. Family (Mimosaceae)

Ethno medicinal use :- Whole plant part are used to treat Hydrocoel.

55.-*Nelumbo nucifera* Gartn. Family (Nymphaeaceae)

Ethno medicinal use :- Root and flower are used in skin diseases and liver problems.

56.-*Nymphaea nouchali* Linn. Family (Nymphaeaceae)

Ethno medicinal use :- Rhizomes extract are used to treat diarrhoea in cattle.

57.*Oxalis corniculata* Linn. Family (Oxalidaceae)

Ethno medicinal use :- Leaf extract are used in cuts.

58.-*Phyla nodiflora* Linn. Family (Verbenaceae)

Ethno medicinal use :- Root extract are used in Indigestion.

59.-*Polygalachinensis* Linn. Family (Polygalaceae)

Ethno medicinal use:- Whole plant part are used in the treatment of Vertigo and headache.

60.*Polygonum glabrum* Wild. Family (Polygonaceae)

Ethno medicinal use :-Leaf extract are used in Eczema.

61.-*Poranapaniculata*Roxb. Family (Convolvulaceae)

Ethno medicinal use:- Whole plant part possesses significant antioxidant activity.

62.-*Portulaca quadrifolia* Linn. Family (Polygonaceae)

Ethno medicinal use :-Whole plant part are used to cure skin diseases.

63.-*Rumexdentatus* Linn. Family (Polygonaceae)

Ethno medicinal use:- Root are used to cure Diarrhoea in cattle.

64.-*Saccharamspontaneum* Linn. Family (Poaceae)

Ethno medicinal use :-Root extract are used to cure Leucorrhoea.

65.-*Sidaacuta*Burm. F. Family (Poaceae)

Ethno medicinal use :-Leaf extract are used in the treatment of boils.

66.-*Solanum nigrum* Linn. Family (Solanaceae)

Ethno medicinal use :- Leaf extract are used in the treatment of gastric disorder.

67.-*Solanum surattense*Burm. f. Family (Solanaceae)

Ethno medicinal use :- Roots and seed are used in the treatment of gastric disorder.

68.-*Solanum xanthocarpum*Sch, and W. Family (Solanaceae)

Ethno medicinal use :--Entire plant is diuretic and antihelmintic.

69.- *Telosmapallida*Roxb. Craib. Family (Asclepiadaceae)

Ethno medicinal use :- Whole plant part are used to treat whooping cough, cold, and asthma.

70.-*Urenalobata* Linn. Family (Malvaceae)

Ethno medicinal use :- Leaf extract are used to treat intestinal disorder.

71.-*Urenasinuate* Linn. Family (Malvaceae)

Ethno medicinal use :- Leaf extract are used to treat nervous disorder.

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