

**SYSTEMATIC ENUMERATION OF UNCULTIVATED FLORA OF GHAZIPUR (U.P.)  
WITH SPECIAL REFERENCE TO MEDICINALLY IMPORTANT SPECIES  
[PART-A(I) : DICOTYLEDONOUS LAND PLANTS]**

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**ABSTRACT**

**Present paper deals with the medicinal flora of Ghazipur, a district of eastern Uttar Pradesh. In this presentation the angiosperm weeds of agricultural fields, wall flora, epiphytic plants and road-side flora of the region have been listed systematically which counts 160 species of 121 genera belonging to 39 families and 28 Orders of 2 Divisions, Lignosae and Herbaceae. Information about therapeutic uses of these plants were collected from villagers and local people especially from practitioners of herbal medicine and physicians. 66 plants from this list were recorded to deserve medicinal property:**

**KEYWORDS :** Systematic Enumeration, Uncultivated Flora, Medicinally Important Species, Ghazipur

Ghazipur is one of the eastern districts of Uttar Pradesh. It lies between the parallels of 25° 19' and 25° 54' north latitude and 83° 4' and 83° 58' east longitude. The height of the district is 67.50 mt. above sea-level. The boundaries of this district are generally conventional, though at places they are marked by natural features, as : The river Ganges from one side and Karmnasa from another dividing it from Bihar State.

Ghazipur is surrounded by Ballia district of U.P. and Bihar State in north east, Jaunpur and Varanasi districts in west, Azamgarh and Mau (erstwhile a part of Azamgarh) districts in north and by Chandauli (erstwhile a part of Varanasi) in south. The total geographic area of this district is 3384 sq.km. This place is a part of mid gangetic plain.

There are ten rivers viz. Ganga, Gomati, Gangi, Beson, Mangai, Bhaisahi, Tons, Udanti, Noni and Karmnasa which either pass through or surround Ghazipur. Ganga, Karmnasa and Gomti are main rivers that make this locality stronger in economic and geographic condition.

The flora of Ghazipur as reported by Singh, (1984) is very rich and includes 103 families and 382 genera of dicots and 26 families and 96 genera of monocots with a total number of species 734 (579 of dicots and 155 of monocots).

Beside it, the rich floral distribution of weeds in this area has attracted Singh et.al., (1996); Khan and Ali (2003) and Mishra & Gupta, (2005) for making taxonomic and ethno-medico-botanical studies. Similar appreciable

works in the field of Weeds and Uncultivated plants have been done by Chakrabarty, (1957); Dixit et al., (1968); Paul and Bhattacharya, (1959); Kumar et al., (1996); Chauhan and Misra (2003).

**MATERIALS AND METHODS**

This piece of work is survey based. Surveys were made fortnightly for a year to collect and identify the dicotyledonous flowering plants of Ghazipur district of South-East Uttar Pradesh. Identifications were made with the help of 'Flora of Upper Gangetic Plain'(Vol. I & II); Duthie, J.F.,1960. The collected plants were categorized according to their systematic positions on the levels of family and order, following Hutchinson, (1959).

Medicinal Values and importance of the flora was considered for special mention. For the purpose, the medicinally important uncultivated wild species were selected for further studies from ayurvedic scripture and for their threat status in wild conditions to conserve them.

**OBSERVATION**

Observation of the survey of uncultivated flora of Ghazipur (U.P.) report that there are 160 species of plants which grow abundantly in the district. The list of collected plants along with their systemic positions is given in Table,1.

From these 160 species of observed plants, 66 species deserve medicinal properties and are separately listed in Table, 2.

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Family Asteraceae is the largest to have a no. of 18 uncultivated plant species out of which 8 plants have medicinal properties.

Family wise observation of uncultivated flora of Ghazipur (U.P.) regarding the number of Genera, Species and number of Medicinal plant species in each family is as follows :

**Table 1 : Uncultivated Terrestrial Dicotyledonous Angiosperms**

Sl. No.	Family	No. of Genera	No. of Species	No. of Med. Pl.
1.	Caesalpinaceae	1	1	1
2.	Papilionaceae	12	16	6
3.	Nyctaginaceae	1	1	1
4.	Capparidaceae	2	4	2
5.	Tamaricaceae	1	1	0
6.	Polygalaceae	1	1	0
7.	Cucurbitaceae	2	2	0
8.	Teliaceae	3	4	0
9.	Sterculiaceae	1	1	0
10.	Malvaceae	4	7	4
11.	Zygophyllaceae	1	1	1
12.	Euphorbiaceae	5	9	4
13.	Apocynaceae	2	2	1
14.	Asclepiadaceae	2	3	2
15.	Rubiaceae	1	3	0
16.	Verbinaceae	3	4	.
17.	Ranunculaceae	1	1	0
18.	Menispermaceae	4	5	5
19.	Papaveraceae	2	2	2
20.	Fumariaceae	1	1	1
21.	Cruciferae	4	4	1
22.	Caryophyllaceae	2	2	0
23.	Ficoidaceae	1	1	0
24.	Portulacaceae	2	2	1
25.	Polygonaceae	2	4	1
26.	Lythraceae	1	1	1
27.	Chenopodiaceae	1	2	2
28.	Amaranthaceae	6	7	3
29.	Primulaceae	1	1	0
30.	Asteraceae	17	18	8
31.	Solanaceae	5	8	7
32.	Convolvulaceae	5	9	4
33.	Scrophulariaceae	5	6	0
34.	Acanthaceae	8	11	4
35.	Orobanchiaceae	1	1	0
36.	Geraniaceae	1	1	0
37.	Oxallidaceae	1	2	0
38.	Boraginaceae	3	4	0
39.	Lamiaceae	8	9	3
	<b>Total</b>	121	160	66

## RESULTS AND DISCUSSION

There are 160 species and 121 Genera of uncultivated, terrestrial, Dicotyledonous Angiosperms in the district belonging to 39 families of 28 orders. Out of

**Table-2 : Uncultivated Medicinal plants of Ghazipur**

Sl.No.	Name of Plant	Family
1.	<i>Caesalpinia cristata</i>	Caesalpinaceae
2.	<i>Abrus precatorius</i>	Papilionaceae
3.	<i>Alhagi pseudalhagi</i>	Papilionaceae
4.	<i>Desmodium gangeticum</i>	Papilionaceae
5.	<i>Cassia sophera</i>	Papilionaceae
6.	<i>C. tora</i>	Papilionaceae
7.	<i>Mucuna puriens</i>	Papilionaceae
8.	<i>Boerhavia diffusa</i>	Nyctaginaceae
9.	<i>Cleome viscosa</i>	Capparidaceae
10.	<i>Capparis dioca</i>	Capparidaceae
11.	<i>Abutilon indicum</i>	Malvaceae
12.	<i>Sida cordifolia</i>	Malvaceae
13.	<i>S. acuta</i>	Malvaceae
14.	<i>S. rhomboidea</i>	Malvaceae
15.	<i>Tribulus terrestris</i>	Zygophyllaceae
16.	<i>Euphorbia hirta</i>	Euphorbiaceae
17.	<i>Acalypha indica</i>	Euphorbiaceae
18.	<i>Phyllanthus niruri</i>	Euphorbiaceae
19.	<i>P. fraternus</i>	Euphorbiaceae
20.	<i>Rauwolfia serpentina</i>	Apocynaceae
21.	<i>Calotropis gigantea</i>	Asclepiadaceae
22.	<i>C. procera</i>	Asclepiadaceae
23.	<i>Lippia nodiflora</i>	Verbinaceae
24.	<i>Cissampelos pareira</i>	Menispermaceae
25.	<i>Cyclea peltata</i>	Menispermaceae
26.	<i>Tinospora cordifolia</i>	Menispermaceae
27.	<i>Coculus villosus</i>	Menispermaceae
28.	<i>C. carolinus</i>	Menispermaceae
29.	<i>Papaver somniferum</i>	Papaveraceae
30.	<i>Argemone Mexicana</i>	Papaveraceae
31.	<i>Fumaria indica</i>	Fumariaceae
32.	<i>Lepidium sativum</i>	Cruciferae
33.	<i>Portulaca quadrifolia</i>	Portulacaceae
34.	<i>Polygonum plebajum</i>	Polygonaceae
35.	<i>Ammania baccifera</i>	Lythraceae
36.	<i>Chenopodium album</i>	Chenopodiaceae
37.	<i>C. murale</i>	Chenopodiaceae
38.	<i>Achyranthes aspera</i>	Amaranthaceae
39.	<i>Amaranthus spinosus</i>	Amaranthaceae
40.	<i>A. viridis</i>	Amaranthaceae
41.	<i>Eclipta alba</i>	Asteraceae
42.	<i>E. prostrate</i>	Asteraceae
43.	<i>Spillanthus achmella</i>	Asteraceae
44.	<i>Tridax procumbens</i>	Asteraceae
45.	<i>Ageratum conyzoides</i>	Asteraceae

46.	<i>Gnaphalium indicum</i>	Asteraceae
47.	<i>Cichoroum intibus</i>	Asteraceae
48.	<i>Bidens pilosa</i>	Asteraceae
49.	<i>Physalis peruviana</i>	Solanaceae
50.	<i>Datura alba</i>	Solanaceae
51.	<i>D. matal</i>	Solanaceae
52.	<i>D. stramonium</i>	Solanaceae
53.	<i>Solanum surattense</i>	Solanaceae
54.	<i>S. nigrum</i>	Solanaceae
55.	<i>Withania somnifera</i>	Solanaceae
56.	<i>Evolvulus alsinoides</i>	Convolvulaceae
57.	<i>Convolvulus pleuricaulis</i>	Convolvulaceae
58.	<i>Ipomoea nil</i>	Convolvulaceae
59.	<i>Operculina turpethum</i>	Convolvulaceae
60.	<i>Peristropheae bicalyculata</i>	Acanthaceae
61.	<i>Rungia parviflora</i>	Acanthaceae
62.	<i>Asteracantha longifolia</i>	Acanthaceae
63.	<i>Adhatoda vasica</i>	Acanthaceae
64.	<i>Ocimum sanctum</i>	Lamiaceae
65.	<i>O. canum</i>	Lamiaceae
66.	<i>Leucas aspera</i>	Lamiaceae

these 39 families 16 belong to Division Lignosae and 23 to Herbaceae and from 28 orders 13 belong to Division Lignosae and 15 to Herbaceae . There are 66 well known medicinal plant species growing uncultivated in unprotected wild conditions in the District. (Table, 2)

From these 66 Plants few have been declared endangered and some show their rareness and can be categorized as Extinct in Wild because of habitat destruction due to urbanization. The rare and endangered species of medicinal plants explored from the district need their rapid conservation.

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