

Research Article

Herbaceous Flora of Muzaffarnagar District (U.P.)

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Abstract: This paper gives an account of 577 herbaceous species belonging to 321 genera and 77 families of Muzaffarnagar district (U.P.). Out of 577 herbaceous species reported, Dicots are represented by 427 and Monocots by 150. Asteraceae, Papilionaceae and Poaceae were found to be the most dominant families.

Keywords: Herb, Muzaffarnagar (U.P.), Upper Gangetic Plain

INTRODUCTION

The district Muzaffarnagar is the western part of U.P. and lies in the upper Indo-gangetic plain. The whole area is fertile with sugarcane, wheat, and rice being the principal crops. It is one of the most fertile farming lands in India. The district Muzaffarnagar lies in the south of Saharanpur and is located at 29° 28' N latitude and 77° 44' E longitude. Rainfall is the most important climatic factor which affects vegetation of this area. 80-90% rainfall occurs during monsoon season from mid June to mid September and temperature varies from very high to very low in summer and winter respectively. In the month of May and June maximum temperature shoots up to 45 °C and falls to a minimum up to 1 °C in December and January. The vegetation of this area is basically similar to that of the state U.P. and Upper Gangetic Plain, with variation due to its geographic and climatic features. During fields surveys and floristic study author collected thousands of plants and recorded 885 species. Out of 885 species, author identified 577 herbaceous plants (Table 1).

MATERIAL AND METHODS

In the course of investigation from 1995-1998 & 2010-2011, the entire district was frequently surveyed. Several attempts were made for collection and study in different seasons in different botanically interested localities like Shukartal, Rohana Shahpur, Budhana, Titawi, Kairana, Shamli, Kandhala, Jaroda, Purkaji, Charthawal, Oon, Chausana, Ganga Khadar etc. During field trips plants were collected from different localities like roadsides, gardens, parks, and cultivated lands of Sugarcane, Rice, Wheat, Jowar, etc. Efforts were made to collect specimens in flowering and fruiting stage and at the same time they were numbered with tags and collected in polythene bags. The collected plants were processed, preserved and mounted on herbarium sheets following the standard herbarium techniques [1]. The dried specimens were identified by consulting different deeds and literatures [2-5]. Besides dried sheets were also matched and confirmed with the DD Herbarium, FRI, Dehradun. The herbarium sheets have been preserved in the Department of Botany, M. College Saharanpur and C.C.S. University, Meerut. List of plants and analysis of various taxa are given in Tables 1 and 2.

Table 1: Plant groups

Plant Groups	Families	Genera	Species
Dicots			
Polypetalae	33	105	186
Gamopetalae	22	114	188
Monochlamydae	08	25	53
Monocots	14	77	150
Total	77	321	577

Table 2: Record of 577 herbs

Botanical Names	Family	Location	Collection No.
<i>Abelmoschus esculentus</i> (L.) Moench	Malvaceae	Jadoda	3174
<i>Abelmoschus moschatus</i> Medik.	Malvaceae	Mzn City	173
<i>Abelmoschus tuberculatus</i> Pal & Singh	Malvaceae	Oon	2347
<i>Abrus precatorius</i> L.	Papilionaceae	Chitora	570
<i>Abutilon hirsutum</i> (Lamk.) Sweet	Malvaceae	Jadoda	1519
<i>Acalypha brachystachya</i> Hornem.	Euphorbiaceae	Oon	2326
<i>Acalypha indica</i> L.	Euphorbiaceae	Mzn City	3644
<i>Achyranthes aspera</i> L.	Amaranthaceae	Mzn City	1
<i>Achyranthes bidentata</i> Bl.	Amaranthaceae	Ramraj	1815
<i>Acrachne racemosa</i> (Heyne) Ohwi.	Poaceae	Ramraj	3013
<i>Aerva lanata</i> (L.) Juss.	Amaranthaceae	Mirapur	3712
<i>Aerva sanguinolenta</i> (L.) Bl.	Amaranthaceae	Shukartal	322
<i>Aerva tomentosa</i> Forsk.	Amaranthaceae	Bahadarpur	3580
<i>Aeschynomene indica</i> L.	Papilionaceae	Mzn City	961
<i>Agave americana</i> L.	Agavaceae	Khatauli	979
<i>Agave cantala</i> Roxb.	Agavaceae	Khatauli	979 a
<i>Agave wightii</i> Dr. & Prain.	Agavaceae	Mzn City	1069
<i>Ageratum conyzoides</i> L.	Asteraceae	Oon	2364
<i>Alcea rosea</i> L.	Malvaceae	Mzn City	127
<i>Alhagi pseudalhagi</i> (Bieb.) Desv.	Papilionaceae	Kairana	684
<i>Allium cepa</i> L.	Liliaceae	Jadoda	952
<i>Allium sativum</i> L.	Liliaceae	Janshat	952 a
<i>Alocasia macrorrhizos</i> (L.) G.Don.	Araceae	Purkaji	5506
<i>Aloe barbadensis</i> Mill.	Liliaceae	Ramraj	576
<i>Alternanthera ficoidea</i> (L.) R.Br. & ex. Roem & Schult.	Amaranthaceae	Kairana	909
<i>Alternanthera pungens</i> Kunth.	Amaranthaceae	Jadoda	2892
<i>Alternanthera sessilis</i> (L.) DC.	Amaranthaceae	Jadoda	1535
<i>Alysicarpus bupleurifolius</i> (L.) DC.	Papilionaceae	Bhokarhedi	2554
<i>Alysicarpus heterophyllus</i> (Baker) Jafri & Ali	Papilionaceae	Alum	4175
<i>Alysicarpus longifolius</i> Wt. & Arn.	Papilionaceae	Mzn City	586
<i>Alysicarpus monilifer</i> DC.	Papilionaceae	Mzn City	674
<i>Alysicarpus rugosus</i> (Willd.) DC.	Papilionaceae	Ramraj	2994
<i>Alysicarpus vaginalis</i> (L.) DC.	Papilionaceae	Bhokarhedi	2550
<i>Amaranthus caudatus</i> L.	Amaranthaceae	Bharsi	4111
<i>Amaranthus cruentus</i> L.	Amaranthaceae	Shamli	2352
<i>Amaranthus spinosus</i> L.	Amaranthaceae	Kakroli	2901
<i>Amaranthus tricolor</i> L.	Amaranthaceae	Oon	2330
<i>Amaranthus viridis</i> L.	Amaranthaceae	Mzn City	163
<i>Ammania buccifera</i> L.	Lythraceae	Mzn City	22
<i>Ammania salicifolia</i> Monti ex. Blume	Lythraceae	Mzn City	743
<i>Anagallis arvensis</i> L.	Primulaceae	Heend	2217
<i>Andrographis echioides</i> (L.) Nees	Acanthaceae	Morna	602

<i>Anethum graveolens</i> L.	Apiaceae	Mzn City	743
<i>Antirrhinum majus</i> L.	Scrophulariaceae	Mzn City	365
<i>Antirrhinum orontium</i> L.	Scrophulariaceae	Shamli	2036
<i>Apluda mutica</i> L.	Poaceae	Shukartal	982
<i>Arabidopsis thaliana</i> (L.) Heynh.	Brassicaceae	Mzn City	1095
<i>Arachis hypogea</i> L.	Papilionaceae	Ramraj	3706
<i>Arenaria serpyllifolia</i> L.	Caryophyllaceae	Kairana	2381
<i>Argemone maxicana</i> L.	Papaveraceae	Bahadarpur	827
<i>Argemone ochroleuca</i> Sweet	Papaveraceae	Shahpur	431
<i>Aristida adscensionis</i> L.	Poaceae	Purkaji	641
<i>Arnebia hispidissima</i> (Lehm.) DC.	Boraginaceae	Shukartal	1000
<i>Artemisia capillaris</i> Thunb.	Asteraceae	Nirana	3633
<i>Artemisia nilagirica</i> (Clarke) Pamp.	Asteraceae	Shamli	5074
<i>Arundo donax</i> L.	Poaceae	Jadoda	3551
<i>Asclepias curassavica</i> L.	Asclepiadaceae	Ramraj	2999
<i>Asparagus racemosus</i> Willd.	Liliaceae	Janshat	405
<i>Asphodelus tenuifolius</i> Cav.	Liliaceae	Oon	2307
<i>Atylosia scarabaeoides</i> (L.) Benth.	Papilionaceae	Bhopa	1007
<i>Atylosia volubilis</i> (Balanco) Gamble	Papilionaceae	Shukartal	4195
<i>Avena sterilis</i> L.	Poaceae	Titawi	3129
<i>Bacopa monnieri</i> (L.) Penn.	Scrophulariaceae	Purkaji	630
<i>Barleria cristata</i> L.	Acanthaceae	Ramraj	1917
<i>Barleria prionitis</i> L.	Acanthaceae	Bhokarhedi	2556
<i>Basella rubra</i> L.	Basellaceae	Mirapur	1850
<i>Bergia ammannioides</i> Heyne ex. Roth.	Elantinnaceae	Gordhanpur	2602
<i>Bidens bipinnata</i> L.	Asteraceae	Mzn City	29
<i>Bidens biternata</i> (Lour.) Merr. & Sheriff.	Asteraceae	Oon	2333
<i>Biophytum sensitivum</i> (L.) DC.	Oxalidaceae	Purkaji	632
<i>Blainvillea acmella</i> (L.) Philipson	Asteraceae	Thanabhawan	2104
<i>Blepharis maderaspatensis</i> (L.) Roth.	Acanthaceae	Alum	4173
<i>Blepharis molluginifolia</i> Pers.	Acanthaceae	Ramraj	1856
<i>Blumea bifoliata</i> (L.) DC.	Asteraceae	Oon	2312
<i>Blumea eriantha</i> DC.	Asteraceae	Mzn City	762
<i>Blumea hieracifolia</i> (D. Don) DC.	Asteraceae	Ramraj	2957
<i>Blumea lacera</i> (Burm.f.)DC.	Asteraceae	Lachheda	2893
<i>Blumea mollis</i> (D. Don) Merr.	Asteraceae	Mzn City	896
<i>Blumea obliqua</i> (L.) Druce.	Asteraceae	Alum	4164
<i>Blumea oxyodonta</i> DC.	Asteraceae	Mzn City	5024
<i>Boerhavia diffusa</i> L.	Nyctaginaceae	Kairana	2414
<i>Boerhavia repanda</i> Willd.	Nyctaginaceae	Purkaji	635
<i>Borreria articularis</i> (L.f.) William.	Rubiaceae	Shahpur	1753
<i>Borreria pusilla</i> (Wall.) DC.	Rubiaceae	Heend	2241
<i>Bothriochloa intermedia</i> (R.Br.) A. Camus.	Poaceae	Kairana	5465
<i>Bothriochloa pertusa</i> (L.) A. Camus	Poaceae	Mirapur	1472

<i>Brachiaria ramosa</i> (L.) Stapf.	Poaceae	Lachheda	2889
<i>Brachiaria reptans</i> (L.) Gard. & Hubb.	Poaceae	Ramraj	3632
<i>Brassica campestris</i> L.	Brassicaceae	Gordhanpur	2641
<i>Brassica juncea</i> (L.) Czern.	Brassicaceae	Mzn City	3583
<i>Brassica oleracea</i> L.	Brassicaceae	Kandhala	5058
<i>Brassica rapa</i> L.	Brassicaceae	Kandhala	5065
<i>Bryophyllum pinnatum</i> (Lamk.) Oken	Crassulaceae	Shamli	5075
<i>Bulbostylis barbata</i> (Rottb.) Clarke	Cyperaceae	Mirapur	3767
<i>Caesulia axillaris</i> Roxb.	Asteraceae	Rohana	1659
<i>Calotropis procera</i> (Willd.) Dryand. ex. W. Ait.	Asclepiadaceae	Mzn City	67
<i>Canna indica</i> L.	Cannaceae	Mzn City	122
<i>Cannabis sativa</i> L.	Cannabinaceae	Garhi	2161
<i>Capsella bursa-pastoris</i> (L.) Medik.	Brassicaceae	Gordhanpur	2677
<i>Capsicum annuum</i> L.	Solanaceae	Oon	2319
<i>Carex fedia</i> Nees	Cyperaceae	Titawi	3104
<i>Carthamus oxyacantha</i> Bieb.	Asteraceae	Alum	2977
<i>Caryopteris odorata</i> (D. Don) Robinson	Verbenaceae	Mzn City	720
<i>Cassia obtusifolia</i> L.	Caesalpiniaceae	Jaroda	1552
<i>Cassia occidentalis</i> L.	Caesalpiniaceae	Mzn City	19
<i>Cassia pumila</i> Lamk.	Caesalpiniaceae	Bhopa	2560
<i>Cassia sophera</i> L.	Caesalpiniaceae	Mzn City	86
<i>Cassia tora</i> L.	Caesalpiniaceae	Mzn City	15
<i>Catharanthus pusillus</i> (Murr.) G. Don	Apocyanaceae	Oon	2359
<i>Catharanthus roseus</i> (L.) G. Don	Apocyanaceae	Janshat	2285
<i>Celosia argentea</i> L.	Amaranthaceae	Shamli	2019
<i>Celosia cristata</i> L.	Amaranthaceae	Mzn City	118
<i>Cenchrus biflorus</i> Roxb.	Poaceae	Purkaji	643
<i>Cenchrus ciliaris</i> L.	Poaceae	Mzn City	171
<i>Cenchrus pennisetiformis</i> Hochst. & Steud. ex. Steud.	Poaceae	Mzn City	3708
<i>Cenchrus setigerus</i> Vahl.	Poaceae	Bahadarpur	3552
<i>Centaurium centauroides</i> (Roxb.) Comb.	Gentianaceae	Kandhala	4205
<i>Centaurium pulchellum</i> (Sw.) Druce.	Gentianaceae	Jhinhana	2029
<i>Centella asiatica</i> (L.) Urban.	Apiaceae	Gordhanpur	2642
<i>Cerastium fontanum</i> Baumg.	Caryophyllaceae	Gordhanpur	2622
<i>Ceratophyllum demersum</i> L.	Ceratophyllaceae	Rohana	798
<i>Chenopodium album</i> L.	Chenopodiaceae	Bhopa	257
<i>Chenopodium ambrosioides</i> L.	Chenopodiaceae	Thanabhawan	1878
<i>Chenopodium murale</i> L.	Chenopodiaceae	Mirapur	1911
<i>Chloris inflata</i> Link	Poaceae	Jaroda	3159
<i>Chromolaena odorata</i> (L.) King & Robinson	Asteraceae	Janshat	2246
<i>Chrysopogon fulvus</i> (Spreng.) Chiov.	Poaceae	Jhinhana	2029
<i>Cicer arietinum</i> L.	Papilionaceae	Shamli	5082
<i>Cichorium intybus</i> L.	Asteraceae	Kandhala	5053
<i>Circium arvense</i> (L.) Scop.	Asteraceae	Nirana	3517

<i>Circium wallichii</i> DC.	Asteraceae	Alum	4152
<i>Citrullus colocynthis</i> (L.) Schrad	Cucurbitaceae	Bhopa	2979
<i>Cleome gynandra</i> L.	Cleomaceae	Shamli	5093
<i>Cleome viscosa</i> L.	Cleomaceae	Rampur	702
<i>Clerodendrum fragrans</i> Vent.	Verbanaceae	Janshat	2279
<i>Clerodendrum inerme</i> (L.) Gaertn.	Verbanaceae	Khatauli	1695
<i>Clerodendrum viscosum</i> Vent.	Verbanaceae	Mansurpur	1622
<i>Coccinia grandis</i> (L.) Voigt.	Cucurbitaceae	Ramraj	3025
<i>Coleus blumei</i> Benth.	Lamiaceae	Heend	2150
<i>Colocasia esculenta</i> (L.) Schott.	Araceae	Shamli	5104
<i>Commelina attenuata</i> Koenig. ex. Vahl.	Commelianaceae	Purkaji	5553
<i>Commelina benghalensis</i> L.	Commelianaceae	Mzn City	2236
<i>Commelina diffusa</i> Burm. f.	Commelianaceae	Mzn City	3622
<i>Commelina erecta</i> L.	Commelianaceae	Janshat	2287
<i>Commelina forsskalaei</i> Vahl	Commelianaceae	Khatauli	5475
<i>Commelina hasskarlii</i> Clark.	Commelianaceae	Mirapur	3777
<i>Commelina padulosa</i> Blume	Commelianaceae	Mzn City	522
<i>Convolvulus pluricaulis</i> Chois.	Convolvulaceae	Baghra	3116
<i>Conyza bonariensis</i> (L.) Cronq.	Asteraceae	Mzn City	279
<i>Conyza canadensis</i> (L.) Cronq.	Asteraceae	Chitora	573
<i>Conyza japonica</i> (Thunb.) Less.	Asteraceae	Shamli	515
<i>Corchorus aestuans</i> L.	Tiliaceae	Jhinhana	2071
<i>Corchorus capsularis</i> L.	Tiliaceae	Gordhanpur	2674
<i>Corchorus olitorius</i> L.	Tiliaceae	Podawali	2688
<i>Corchorus tridens</i> L.	Tiliaceae	Lachheda	2899
<i>Corchorus trilocularis</i> L.	Tiliaceae	Sherpur	3618
<i>Coriandrum sativum</i> L.	Apiaceae	Alum	4243
<i>Coronopus didymus</i> J. E. Smith	Brassicaceae	Mzn City	3549
<i>Cotula anthemoides</i> L.	Asteraceae	Kairana	1422
<i>Crotolaria burhia</i> Buch.-Ham.	Papilionaceae	Mzn City	176
<i>Crotolaria juncea</i> L.	Papilionaceae	Shamli	2304
<i>Crotolaria medicaginea</i> Lamk.	Papilionaceae	Alum	4057
<i>Crotolaria mysorensis</i> Roth.	Papilionaceae	Shamli	3857
<i>Crotolaria sessiliflora</i> L.	Papilionaceae	Gordhanpur	2671
<i>Croton bonplandianum</i> Baillon	Euphorbiaceae	Kairana	900
<i>Cucumis melo</i> L.	Cucurbitaceae	Ramraj	3787
<i>Curcuma longa</i> L.	Zingiberaceae	Shahpur	1076
<i>Cyamopsis tetragonoloba</i> L.	Papilionaceae	Ramraj	3718
<i>Cynoglossum lanceolatum</i> Forsk.	Boraginaceae	Yayapur	1545
<i>Cyanotis cristata</i> (L.) Schult.	Commelianaceae	Mirapur	3714
<i>Cyathocline purpurea</i> (D. Don) O. Kuntze	Asteraceae	Janshat	2286
<i>Cynodon dactylon</i> (L.) Pers.	Poaceae	Kandhala	3081
<i>Cyperus alopecuroides</i> Rott.	Cyperaceae	Shukartal	1044
<i>Cyperus alulatus</i> Kern.	Cyperaceae	Baghra	1143

<i>Cyperus compressus</i> L.	Cyperaceae	Ramraj	1889
<i>Cyperus corymbosus</i> Rottb.	Cyperaceae	Mzn City	54
<i>Cyperus cuspidatus</i> H. B. & K.	Cyperaceae	Kandhala	3073
<i>Cyperus cyperoides</i> (L.) O. Kuntze	Cyperaceae	Mirapur	1478
<i>Cyperus difformis</i> L.	Cyperaceae	Kandhala	3070
<i>Cyperus globosus</i> All.	Cyperaceae	Rampur	259
<i>Cyperus iria</i> L.	Cyperaceae	Shamli	3735
<i>Cyperus kyllingia</i> Endl.	Cyperaceae	Rampur	263
<i>Cyperus niveus</i> Retz.	Cyperaceae	Purkaji	1440
<i>Cyperus nutans</i> Vahl.	Cyperaceae	Shukartal	1040
<i>Cyperus pangorei</i> Rottb.	Cyperaceae	Chitora	560
<i>Cyperus pumilus</i> L.	Cyperaceae	Mzn City	579
<i>Cyperus pygmaeus</i> Rottb.	Cyperaceae	Jhijnhana	175
<i>Cyperus rotundus</i> L.	Cyperaceae	Janshat	3713
<i>Cyperus sesquiflorus</i> (Rotz.) Kunth.	Cyperaceae	Nirgajani	1735
<i>Cyperus triceps</i> (Rottb.) Endl.	Cyperaceae	Ramraj	1884
<i>Dactyloctenium aegyptium</i> (L.) P. Beauv.	Poaceae	Ramraj	3755
<i>Dactyloctenium indicum</i> Boiss.	Poaceae	Gordhanpur	2656
<i>Datura metel</i> L.	Solanaceae	Oon	2315
<i>Datura stramonium</i> L.	Solanaceae	Mzn City	131
<i>Daucus carota</i> L.	Apiaceae	Bharsi	4132
<i>Delphinium ajacis</i> L.	Ranunculaceae	Mzn City	2126
<i>Dendrocalamus strictus</i> (Roxb.) Nees	Poaceae	Mzn City	1420
<i>Desmodium gangeticum</i> (L.) DC.	Papilionaceae	Barla	1775
<i>Desmodium pulchellum</i> (L.) Benth.	Papilionaceae	Shukartal	601
<i>Desmodium triflorum</i> (L.) DC.	Papilionaceae	Mzn City	500
<i>Desmostachya bipinnata</i> (L.) Stapf.	Poaceae	Mansurpur	228
<i>Dianthus barbatus</i> L.	Caryophyllaceae	Mzn City	364
<i>Dianthus chinensis</i> L.	Caryophyllaceae	Mzn City	364 a
<i>Dicanthium annulatum</i> (Forsk.) Stapf.	Poaceae	Jaroda	3161
<i>Dicliptera roxburghiana</i> Nees	Acanthaceae	Alum	4153
<i>Digera muricata</i> (L.) Mart.	Amaranthaceae	Purkaji	647
<i>Digitaria adscendens</i> (H.B.K.) Henr.	Poaceae	Ramraj	3754
<i>Digitaria setigera</i> Roth.	Poaceae	Mzn City	3647
<i>Digitaria stricta</i> Roth. ex. Roem. & Schult.	Poaceae	Bhopa	2550
<i>Dipteracanthus prostratus</i> (Poir.) Nees	Acanthaceae	Bhopa	2922
<i>Dopatrium junceum</i> (Roxb.) Buch.-Ham. ex. Benth.	Scrophulariaceae	Khatauli	1585
<i>Drymaria cordata</i> (L.) Willd.	Caryophyllaceae	Kairana	1808
<i>Duchesnea indica</i> (Andr.) Focke	Rosaceae	Rampur	4143
<i>Echinochloa colonum</i> (L.) Link.	Poaceae	Titawi	1626
<i>Echinochloa crus-galli</i> (L.) P. Beauv.	Poaceae	Shamli	3227
<i>Echinochloa frumentacea</i> L.	Poaceae	Banat	3172
<i>Echinops echinatus</i> Roxb.	Asteraceae	Kanyan	4092
<i>Eclipta prostrata</i> (L.) L.	Asteraceae	Janshat	2288

<i>Eleocharis atropurpurea</i> (Retz.) Kunth.	Cyperaceae	Mzn City	579
<i>Eleocharis palustris</i> R. Br.	Cyperaceae	Kandhala	3056
<i>Eleusine coracona</i> (L.) Gaertn.	Poaceae	Banat	3336
<i>Eleusine indica</i> (L.) Gaertn.	Poaceae	Babri	2542
<i>Eleusine verticillata</i> Roxb.	Poaceae	Mzn City	3626
<i>Eragrostis atrovirens</i> (Desf.) Trin. ex. Steud.	Poaceae	Purkaji	1410
<i>Eragrostis ciliaris</i> (L.) R. Br.	Poaceae	Jaroda	1504
<i>Eragrostis diarrhena</i> (Schult.) Steud.	Poaceae	Jaroda	999
<i>Eragrostis gangetica</i> (Roxb.) Steud.	Poaceae	Ramraj	1488
<i>Eragrostis tenella</i> var. <i>plumosa</i> Hook. f.	Poaceae	Karoda	2537
<i>Elytraria acalis</i> (L.f.) Linden.	Acanthaceae	Ramraj	3780
<i>Emilia sonchifolia</i> (L.) DC.	Asteraceae	Barla	1774
<i>Epilobium hirsutum</i> L.	Onagraceae	Mzn City	3612
<i>Eragrostis minor</i> Host.	Poaceae	Bharsi	4104
<i>Eragrostis pilosa</i> (L.) P. Beauv.	Poaceae	Mirapur	3727
<i>Eragrostis trimula</i> Hochst. ex. Steud.	Poaceae	Ramraj	3728
<i>Erigeron sublyratus</i> DC.	Asteraceae	Kakroli	2946
<i>Eriochloa procera</i> (Retz.) C. E. Hubb.	Poaceae	Badehadi	1713
<i>Eriophorum comosum</i> Wall. ex. Nees	Cyperaceae	Kakroli	1911
<i>Eruca vasicaria</i> (L.) Cav.	Brassicaceae	Shamli	222
<i>Eupatorium riparium</i> Regel.	Asteraceae	Jaroda	3193
<i>Euphorbia dracunculoides</i> Lamk.	Euphorbiaceae	Shamli	1902
<i>Euphorbia geniculata</i> Orteg.	Euphorbiaceae	Janshat	3701
<i>Euphorbia helioscopia</i> L.	Euphorbiaceae	Mzn City	392
<i>Euphorbia hirta</i> L.	Euphorbiaceae	Mzn City	2
<i>Euphorbia parviflora</i> L.	Euphorbiaceae	Shamli	5089
<i>Euphorbia prostrata</i> W. Ait.	Euphorbiaceae	Khatauli	1692
<i>Euphorbia thymifolia</i> L.	Euphorbiaceae	Ramraj	1873
<i>Evolvulus alsinoides</i> (L.) L.	Convolvulaceae	Bharsi	4038
<i>Fimbristylis bis-umbellata</i> (Forsk.) Bub.	Cyperaceae	Rohana	1663
<i>Fimbristylis cymosa</i> R. B r.	Cyperaceae	Jaroda	2888
<i>Fimbristylis miliacea</i> (L.) Vahl.	Cyperaceae	Khatauli	1587
<i>Fimbristylis ovata</i> (Burm. f.) Kern	Cyperaceae	Banat	3215
<i>Fimbristylis tenera</i> Roem. & Schult.	Cyperaceae	Mirapur	1497
<i>Fimbristylis dichotoma</i> (L.) Vahl	Cyperaceae	Khatauli	5441
<i>Fioria vitifolia</i> (L.) Mattei.	Malvaceae	Jaroda	3152
<i>Foeniculum vulgare</i> Mill.	Apiaceae	Mzn City	743
<i>Fumaria indica</i> (Hauskn.) Pugsley	Fumariaceae	Mzn City	195
<i>Galinsoga parviflora</i> Cav.	Asteraceae	Shukartal	5037
<i>Galium aparine</i> L.	Rubiaceae	Oon	2305
<i>Galphimia gracilis</i> Bartl	Malpighiaceae	Ramraj	2667
<i>Gendarussa vulgaris</i> Nees	Acanthaceae	Budhana	2477
<i>Gisekia pharnaceoides</i> L.	Molluginaceae	Gordhanpur	2643
<i>Glinus lotoides</i> L.	Molluginaceae	Gordhanpur	2698

<i>Glinus oppositifolius</i> (L.) DC.	Molluginaceae	Mzn City	5029
<i>Gnaphalium luteo-album</i> L.	Asteraceae	Mzn City	3557
<i>Gnaphalium pensylvanicum</i> Willd.	Asteraceae	Mzn City	297
<i>Gnaphalium polycaulon</i> Pers.	Asteraceae	Mzn City	771
<i>Gnaphalium pulvinatum</i> Delile.	Asteraceae	Kairana	893
<i>Gomphrena celosioides</i> Mart.	Amaranthaceae	Ramraj	2966
<i>Gossypium hirsutum</i> L.	Malvaceae	Kandhala	5052
<i>Grangea maderaspatana</i> (L.) Poir.	Asteraceae	Heend	2194
<i>Hedyotis affinis</i> (Roem. & Schult.) DC.	Rubiaceae	Bharsi	4191
<i>Hedyotis corymbosa</i> (L.) Lamk.	Rubiaceae	Mirapur	2267
<i>Heliotropium eichwaldii</i> Steud. ex. DC.	Boraginaceae	Jaroda	3173
<i>Heliotropium indicum</i> L.	Boraginaceae	Mzn City	940
<i>Heliotropium strigosum</i> Willd.	Boraginaceae	Bhabhisa	4110
<i>Hemarthria compressa</i> (L.f.) R.Br.	Poaceae	Badehadi	1721
<i>Hemigraphis hirta</i> T. Anders.	Acanthaceae	Kakroli	901
<i>Heteropogon contortus</i> (L.) P. Beauv.	Poaceae	Jaroda	692
<i>Hibiscus cannabinus</i> L.	Malvaceae	Mzn City	186
<i>Hibiscus lobatus</i> (Murr.) O. Kuntze	Malvaceae	Shamli	5077
<i>Hoppea dichotoma</i> Hayne ex. Willd.	Gentianaceae	Charthawal	2130
<i>Hordeum vulgare</i> L.	Poaceae	Kandhala	2463
<i>Hybanthus enneaspermus</i> (L.) F. Muell.	Violaceae	Mirapur	2289
<i>Hydrolea zeylanica</i> (L.) Vahl.	Hydrophyllaceae	Kairana	3778
<i>Hygroryza aristata</i> (Retz.) Nees ex. Wt. Arn	Poaceae	Shukartal	1033
<i>Hygrophila auriculata</i> (Schum.) Heine	Acanthaceae	Mzn City	682
<i>Hygrophila polysperma</i> (Roxb.) T. Anders	Acanthaceae	Mzn City	83
<i>Hyptis suaveolens</i> (L.) Poit.	Lamiaceae	Oon	4130
<i>Iberis amara</i> L.	Brassicaceae	Mzn City	5005
<i>Impatiens balsamina</i> L.	Balsamiaceae	Ramraj	1852
<i>Imperata cylindrica</i> (L.) P. Beauv.	Poaceae	Jaroda	1501
<i>Indigofera astragalina</i> DC.	Papilionaceae	Oon	155
<i>Indigofera cordifolia</i> Heyne ex. Roth.	Papilionaceae	Gordhanpur	2725
<i>Indigofera glabra</i> L.	Papilionaceae	Jaroda	695
<i>Indigofera glandulosa</i> Willd.	Papilionaceae	Shukartal	1004
<i>Indigofera linifolia</i> (L. f.) Retz.	Papilionaceae	Rohana	271
<i>Indigofera linnaei</i> Ali.	Papilionaceae	Sujaru	2766
<i>Indigofera tinctoria</i> L.	Papilionaceae	Shamli	5071
<i>Ipomoea aquatica</i> Forsk.	Convolvulaceae	Gordhanpur	2699
<i>Ipomoea batatas</i> (L.) Lamk.	Convolvulaceae	Bhopa	5031
<i>Ipomoea coptica</i> (L.) Roth.	Convolvulaceae	Ramraj	3757
<i>Ipomoea dichroa</i> (Roem. ex. Schult.) Choisy	Convolvulaceae	Bamanheri	706
<i>Ipomoea eriocarpa</i> R. Br.	Convolvulaceae	Bamanheri	705
<i>Ipomoea hederifolia</i> L.	Convolvulaceae	Mirapur	1814
<i>Ipomoea nil</i> (L.) Roth.	Convolvulaceae	Oon	2342
<i>Ipomoea pes-tigridis</i> L.	Convolvulaceae	Thanabhawan	2074

<i>Ipomoea purpurea</i> (L.) Roth.	Convolvulaceae	Mzn City	651
<i>Ipomoea quamoclit</i> L.	Convolvulaceae	Jaroda	3194
<i>Ipomoea indica</i> Stapf.	Convolvulaceae	Mzn City	191
<i>Juncus bufonius</i> L.	Juncaceae	Mzn City	761
<i>Kalanchoe integra</i> (Medik.) Kuntze	Crassulaceae	Mzn City	191
<i>Lablab purpureus</i> (L.) Sweet	Papilionaceae	Ramraj	1811
<i>Lactuca sativa</i> L.	Asteraceae	Shamli	4073
<i>Laggera aurita</i> Sch.-Bip. ex. Cl.	Asteraceae	Heend	2170
<i>Laggera flava</i> Benth. & Hook. f.	Asteraceae	Alum	4155
<i>Laportea interrupta</i> (L.) Chew.	Urticaceae	Mirapur	3703
<i>Lathyrus aphaca</i> L.	Papilionaceae	Charthawal	2133
<i>Lathyrus odoratus</i> L.	Papilionaceae	Jaroda	2828
<i>Lathyrus sativus</i> L.	Papilionaceae	Mzn City	206
<i>Launaea acaulis</i> (Roxb.) Babcock	Asteraceae	Shamli	4041
<i>Launaea aspleniifolia</i> (Willd.) Hook.f.	Asteraceae	Shukartal	4036
<i>Launaea procumbans</i> (Roxb.) Ramayya & Rajgopal	Asteraceae	Jaroda	2874
<i>Lens culinaris</i> Medik.	Papilionaceae	Heend	2193
<i>Leonotis nepetifolia</i> (L.) W. Ait.	Lamiaceae	Jaroda	690
<i>Lepidagathis hamiltoniana</i> Wall.	Acanthaceae	Bhopa	3196
<i>Lepidium sativa</i> L.	Brassicaceae	Kandhala	5066
<i>Leptochloa chinensis</i> (L.) Nees.	Poaceae	Budhana	2408
<i>Leptochloa panicea</i> (Retz.) Ohwi.	Poaceae	Mzn City	469
<i>Leucas aspera</i> (Willd.) Spreng.	Lamiaceae	Mansurpur	1593
<i>Leucas cephalotes</i> (Roth.) Spreng.	Lamiaceae	Thanabhawan	2107
<i>Leucas utricifolia</i> (Vahl.) R.Br.	Lamiaceae	Titawi	3631
<i>Lindenbergia indica</i> (L.) O. Kuntze	Scrophulariaceae	Heend	2139
<i>Lindernia ciliata</i> (Colsm.) Penn.	Scrophulariaceae	Jaroda	3002
<i>Lindernia crustacea</i> (L.) F. Muell.	Scrophulariaceae	Kandhala	3037
<i>Lindernia parviflora</i> (Roxb.) Hains.	Scrophulariaceae	Mansurpur	1617
<i>Linum usitatissimum</i> L.	Linaceae	Shahpur	1273
<i>Lolium temulentum</i> L.	Poaceae	Mzn City	824
<i>Lotus corniculata</i> L.	Papilionaceae	Mzn City	3621
<i>Ludwigia adscendens</i> (L.) Hara	Onagraceae	Banat	2536
<i>Ludwigia perennis</i> L.	Onagraceae	Kandhala	4193
<i>Ludwigia prostrata</i> Roxb.	Onagraceae	Thanabhawan	2114
<i>Lycopersicon lycopersicum</i> (L.) Karsten	Solanaceae	Janshat	1466
<i>Malva parviflora</i> L.	Malvaceae	Alum	3526
<i>Malvastrum coromandelianum</i> (L.) Garck.	Malvaceae	Bhopa	3119
<i>Martynia annua</i> L.	Martyniaceae	Rohana	1645
<i>Mazus pumilus</i> (Burm. f.) Steen.	Scrophulariaceae	Alum	4137
<i>Medicago lupulina</i> L.	Papilionaceae	Mzn City	773
<i>Medicago polymorpha</i> L.	Papilionaceae	Heend	2212
<i>Medicago sativa</i> L.	Papilionaceae	Karoda	2459
<i>Melilotus alba</i> Medik.	Papilionaceae	Budhana	2511

<i>Melilotus indica</i> (L.) All.	Papilionaceae	Mohd.Pur	2514
<i>Melochia corchorifolia</i> L.	Sterculiaceae	Mzn City	110
<i>Mentha piperita</i> L.	Lamiaceae	Chitora	556
<i>Mentha spicata</i> L.	Lamiaceae	Mzn City	2763
<i>Merremia aegyptica</i> (L.) Urban.	Convolvulaceae	Bhopa	2660
<i>Merremia dissecta</i> (Jacq.) Hallier. f.	Convolvulaceae	Mzn City	742
<i>Micromeria biflora</i> (Buch.-Ham. ex. Don) Benth.	Lamiaceae	Thanabhawan	2089
<i>Mimosa pudica</i> L.	Mimosaceae	Morna	366
<i>Mirabilis jalapa</i> L.	Nyctaginaceae	Purkaji	599
<i>Mollugo cerviana</i> (L.) Ser.	Molluginaceae	Jhinhana	2045
<i>Mollugo nudicaulis</i> Lamk.	Molluginaceae	Rohana	2611
<i>Mollugo pentaphylla</i> L.	Molluginaceae	Shukartal	1018
<i>Monochoria hastata</i> (L.) Solm.	Pontederiaceae	Chitora	593
<i>Murdannia nudiflora</i> (L.) Brenan	Commelinaceae	Basera	1742
<i>Musa paradisiaca</i> L.	Musaceae	Shahpur	1075
<i>Nepeta graciliflora</i> Benth.	Lamiaceae	Ramraj	2981
<i>Nepeta hindostana</i> (Roth.) Haines.	Lamiaceae	Janshat	1863
<i>Nicotiana plumbaginifolia</i> Viv.	Solanaceae	Mzn City	157
<i>Nicotiana rustica</i> L.	Solanaceae	Kairana	879
<i>Nicotiana tabacum</i> L.	Solanaceae	Mzn City	286
<i>Nigella sativa</i> L.	Ranunculaceae	Mzn City	5001
<i>Nymphoides cristatum</i> (Roxb.) O. Kuntze	Menyanthaceae	Mzn City	328
<i>Ocimum basilicum</i> L.	Lamiaceae	Mzn City	170
<i>Ocimum canum</i> L.	Lamiaceae	Kandhala	595
<i>Ocimum sanctum</i> L.	Lamiaceae	Bhopa	2932
<i>Oenanthe javanivca</i> (bl.) DC.	Apiaceae	Shukartal	1028
<i>Oenothera drummondii</i> Hook.	Onagraceae	Budhana	2481
<i>Oenothera rosea</i> W. Ait.	Onagraceae	Mzn City	3606
<i>Oldenlandia brachiata</i> Hook. f.	Rubiaceae	Mansurpur	1616
<i>Oplismenus burmannii</i> (Retz.) P. Beauv.	Poaceae	Mzn City	671
<i>Oplismenus compositus</i> (L.) P. Beauv.	Poaceae	Mzn City	3634
<i>Orthosiphon pallidus</i> Royle ex. Benth.	Lamiaceae	Podawali	2619
<i>Orobanche aegyptica</i> Pers.	Orobanchaceae	Mzn City	4261
<i>Oryza sativa</i> L.	Poaceae	Mzn City	30
<i>Ottelia alismoides</i> (L.) Pers	Hydrocharitaceae	Purkaji	620
<i>Oxalis corniculata</i> L.	Oxalidaceae	Mzn City	536
<i>Oxalis debilis</i> H.B.K.	Oxalidaceae	Mzn City	290
<i>Oxalis richardiana</i> Babu	Oxalidaceae	Mzn City	92
<i>Oxystelma secamone</i> (L.) K. Schum.	Asclepiadaceae	Rohana	790
<i>Panicum antidotale</i> Retz.	Poaceae	Barla	1765
<i>Panicum maxima</i> Jacq.	Poaceae	Alum	4104
<i>Panicum miliare</i> Lamk.	Poaceae	Alum	4169
<i>Panicum paludosum</i> Roxb.	Poaceae	Ramraj	2976
<i>Panicum trypheron</i> Schult.	Poaceae	Alum	4133

<i>Papaver rhoeas</i> L.	Papaveraceae	Charthawal	2701
<i>Parthenium hysterophorus</i> L.	Asteraceae	Oon	2335
<i>Paspalidium flavidum</i> (Retz.) A. Camus	Poaceae	Bharsi	4182
<i>Paspalidium geminatum</i> Forsk.	Poaceae	Jaroda	1500
<i>Paspalidium punctatum</i> (Burm.) A. Camus	Poaceae	Ramraj	1875
<i>Paspalum paspalodes</i> (Michx.) Scribrn.-Mem.	Poaceae	Janshat	1470
<i>Paspalum scrobiculatum</i> L.	Poaceae	Purkaji	3551
<i>Passiflora caerulea</i> L.	Passifloraceae	Nirana	1200
<i>Pavonia repanda</i> (J. E. Sm.) Spreng	Malvaceae	Mzn City	5012
<i>Pedaliium murex</i> L.	Pedaliaceae	Bhopa	611
<i>Pedilanthus tithymaloides</i> (L.) Poir	Euphorbiaceae	Shamli	5072
<i>Pentanema indicum</i> (L.) Ling.	Asteraceae	Janshat	1482
<i>Pentanema vestitum</i> (Wall. ex. DC.) Ling.	Asteraceae	alum	4045
<i>Pentapetes phloenicea</i> L.	Sterculiaceae	Janshat	2257
<i>Pennisetum typhoides</i> (Burm. f.) Stapf. & Hubb	Poaceae	Alum	4126
<i>Pergularia daemia</i> (Forsk.) Blatt. & Mcc.	Asclepiadaceae	Kanyan	4097
<i>Peristrophe bicalyculata</i> (Retz.) Nees	Acanthaceae	Morna	3079
<i>Perotis hordeiformis</i> Nees ex. Hook. & Arn.	Poaceae	Khatauli	617
<i>Perotis indica</i> (L.) Kuntze	Poaceae	Banat	3207
<i>Petunia axillaris</i> (Lamk.) Britton.	Solanaceae	Mzn City	358
<i>Phalaris minor</i> Retz.	Poaceae	Kandhala	2382
<i>Phlox drummondii</i> Hook.	Polemoniaceae	Mzn City	4101
<i>Phragmites karka</i> (Retz.) Trin. ex. Steud.	Poaceae	Rampur	4569
<i>Phyla nudiflora</i> (L.) Greene	Verbanaceae	Kairana	897
<i>Phyllanthus fraternus</i> Webster	Euphorbiaceae	Titawi	1643
<i>Phyllanthus maderaspatensis</i> L.	Euphorbiaceae	Heend	2207
<i>Phyllanthus urinaria</i> L.	Euphorbiaceae	Rohana	2711
<i>Phyllanthus virgatus</i> Forst.	Euphorbiaceae	Shamli	5092
<i>Physalis minima</i> L.	Solanaceae	Nirana	3562
<i>Pisum arvense</i> L.	Papilionaceae	Bhopa	5042
<i>Pisum sativum</i> L.	Papilionaceae	Mzn City	196
<i>Plantago major</i> L.	Plantaginaceae	Kairana	1409
<i>Plectranthus japonicus</i> (Burm. f.) koidz.	Lamiaceae	Lachheda	2925
<i>Pluchea lanceolata</i> Cl.	Asteraceae	Jaroda	2872
<i>Plumbago auriculata</i> Lamk.	Plumbaginaceae	Jaroda	3157
<i>Plumbago zeylanica</i> L.	Plumbaginaceae	Lachheda	2854
<i>Poa annua</i> L.	Poaceae	Bahadarpur	3572
<i>Pogostemon benghalense</i> (Burm. f.) O. Kuntze	Lamiaceae	Bahadarpur	3593
<i>Polycarpaea corymbosa</i> (L.) Lamk.	Caryophyllaceae	Shukartal	1017
<i>Polygala arvensis</i> Willd.	Polygalaceae	Ramraj	4176
<i>Polygala crotolariodes</i> Bunch.-Hem.	Polygalaceae	Budhana	644
<i>Polygala erioptera</i> DC.	Polygalaceae	Dungar	634
<i>Polygonum barbatum</i> L.	Polygonaceae	Shukartal	1030
<i>Polygonum glabrum</i> Willd.	Polygonaceae	Rampur	244

<i>Polygonum hydropiper</i> L.	Polygonaceae	Mzn City	52
<i>Polygonum plebeium</i> R. Br.	Polygonaceae	Mzn City	802
<i>Polypogon monspeliensis</i> (L.) Desf.	Poaceae	Babri	2525
<i>Portulaca oleracea</i> L.	Portulacaceae	Mzn City	20
<i>Portulaca quadrifida</i> L.	Portulacaceae	Thanabhawan	2078
<i>Potentilla supina</i> L.	Rosaceae	Ramraj	3860
<i>Pouzolzia hirta</i> Hassk.	Urticaceae	Barla	1722
<i>Pouzolzia pentandra</i> (Roxb.) Benn.	Urticaceae	Shukartal	1061
<i>Pouzolzia zeylanica</i> (L.) Benn.	Urticaceae	Mzn City	6020
<i>Primula floribunda</i> Wall.	Primulaceae	Ramraj	2249
<i>Primula umbellata</i> (Lour.) Bentvelzon.	Primulaceae	Khatauli	5422
<i>Pulicaria angustifolia</i> DC.	Asteraceae	Oon	633
<i>Pupalia lappacea</i> (L.) Juss.	Amaranthaceae	Khatauli	1572
<i>Ranunculus pensylvanicus</i> L.	Ranunculaceae	Bahadarpur	100
<i>Ranunculus sceleratus</i> L.	Ranunculaceae	Shukartal	311
<i>Raphanus sativus</i> L.	Brassicaceae	Chitora	4216
<i>Rhoeo spathacea</i> (Sw.) Wt. Stern.	Commelianaceae	alum	4251
<i>Rhynchosia minima</i> (L.) DC.	Papilionaceae	Khatauli	1582
<i>Rhynchosia capitata</i> DC.	Papilionaceae	Kakroli	2900
<i>Rhynchosia minima</i> (L.) DC. var. minima Meikla	Papilionaceae	Badhiwala	634
<i>Rorippa indica</i> (L.) Hiern.	Brassicaceae	Mzn City	728
<i>Rorippa montana</i> Small.	Brassicaceae	Mzn City	5208
<i>Rorippa nasturtium-aquaticum</i> (L.) Hayek.	Brassicaceae	Rampur	272
<i>Rotala indica</i> (Willd.) Koehne	Lythraceae	Mirapur	3862
<i>Roylea cinerea</i> (D. Don) Baillon	Lamiaceae	Janshat	2295
<i>Ruellia tuberosa</i> L.	Acanthaceae	Goharpur	868
<i>Rumex dentatus</i> L.	Polygonaceae	Janshat	2271
<i>Rumex hastatus</i> D. Don	Polygonaceae	Gordhanpur	2670
<i>Rungia pectinata</i> (L.) Nees	Acanthaceae	Jaroda	2829
<i>Rungia repens</i> (L.) Nees	Acanthaceae	Mzn City	581
<i>Saccharum bengalense</i> Retz.	Poaceae	Jaroda	3167
<i>Saccharum officinarum</i> L.	Poaceae	Bhopa	2924
<i>Saccharum spontaneum</i> L.	Poaceae	Mzn City	70
<i>Salvia coccinia</i> Juss. ex. Murr.	Lamiaceae	Mzn City	253
<i>Salvia plebeia</i> R. Br.	Lamiaceae	Jaroda	2856
<i>Saussurea heteromalla</i> (D.Don) Hand-Mazz.	Asteraceae	Kandhala	4237
<i>Scirpus affinis</i> Roth.	Cyperaceae	Kairana	1450
<i>Scirpus comosus</i> Wall.	Cyperaceae	Mzn City	3653
<i>Scirpus littoralis</i> Schrod.	Cyperaceae	Mzn City	371
<i>Scirpus mucronatus</i> L.	Cyperaceae	Rohana	794
<i>Scirpus roylei</i> (Nees) Parker	Cyperaceae	Rohana	1078
<i>Scirpus supinus</i> L.	Cyperaceae	Alum	4260
<i>Scirpus tuberosus</i> Desf.	Cyperaceae	Rohana	793
<i>Scoparia asiatica</i> (L.) O. Kuntze	Scrophulariaceae	Mirapur	3769

<i>Scoparia dulcis</i> L.	Scrophulariaceae	Budhana	2471
<i>Scoparia euphrasioides</i> (Vahl.) Benth.	Scrophulariaceae	Ramraj	3016
<i>Scutellaria repens</i> Buch.-Ham. ex. D.Don	Lamiaceae	Shamli	4067
<i>Sesamum orientale</i> L.	Pedaliaceae	Bhopa	596
<i>Sesbania bispinosa</i> (Jacq.) WF.	Papilionaceae	Patti-Kheri	4201
<i>Setaria glauca</i> (L.) P. Beauv.	Poaceae	Mzn City	470
<i>Setaria intermedia</i> (Roth.) Roem. & Schult.	Poaceae	Makhyali	544
<i>Setaria verticillata</i> (L.) P. Beauv.	Poaceae	Mzn City	3663
<i>Sida acuta</i> Burm. f.	Malvaceae	Baghra	3701
<i>Sida alba</i> L.	Malvaceae	Lachheda	2896
<i>Sida cordata</i> (Burm. f.) Bross.	Malvaceae	Bharsi	412
<i>Sida cordifolia</i> L.	Malvaceae	Alum	4037
<i>Sida ovata</i> Forsk.	Malvaceae	Mirapur	2284
<i>Sida rhombifolia</i> L.	Malvaceae	Bahadarpur	1408
<i>Silene conoidea</i> L.	Caryophyllaceae	Kandhala	2419
<i>Solanum indicum</i> L.	Solanaceae	Heend	2242
<i>Solanum melongena</i> L.	Solanaceae	Shukartal	1014
<i>Solanum nigrum</i> L.	Solanaceae	Shukartal	1038
<i>Solanum surattense</i> Burm.f.	Solanaceae	Janshat	2291
<i>Solanum tuberosum</i> L.	Solanaceae	Heend	2173
<i>Soliva anthemifolia</i> (Juss.) R.Br.	Asteraceae	Jaroda	2867
<i>Sonchus asper</i> (L.) Hill.	Asteraceae	Mzn City	50
<i>Sonchus brachyotus</i> DC.	Asteraceae	Barla	2858
<i>Sonchus oleraceus</i> L.	Asteraceae	Ramraj	3637
<i>Sorghum halepense</i> (L.) Pers.	Poaceae	Alum	4233
<i>Sorghum vulgare</i> Pers.	Poaceae	Mzn City	165
<i>Spergula arvensis</i> L.	Caryophyllaceae	Thanabhawan	2076
<i>Spergula fallax</i> (Lowe) Krouse	Caryophyllaceae	Janshat	2296
<i>Sphaeranthus senegalensis</i> DC.	Asteraceae	Kanyan	4166
<i>Sphenoclea zeylanica</i> Gaertn.	Sphenocleaceae	Gordhanpur	2964
<i>Spinacea oleracea</i> L.	Chenopodiaceae	Shamli	2541
<i>Sporobolus coromandelianus</i> (Retz.) Kunth.	Poaceae	Rampur	4561
<i>Sporobolus indicus</i> (L.) R. Br.	Poaceae	Mzn City	3619
<i>Stellaria media</i> (L.) Vill.	Caryophyllaceae	Mzn City	4541
<i>Striga asiatica</i> (L.) O. Kuntze	Scrophulariaceae	Mirapur	3696
<i>Striga euphrasioides</i> (Vohl.) Benth.	Scrophulariaceae	Ramraj	3016
<i>Suaeda maritima</i> (L.) Dumort.	Amaranthaceae	Ramraj	3758
<i>Tephrosia pumila</i> (Lamk.) Pers.	Papilionaceae	Bhokarhedi	2555
<i>Tephrosia purpurea</i> (L.) Pers.	Papilionaceae	Titawi	3109
<i>Tephrosia strigosa</i> (Dalz.) Santap. & Mahesh	Papilionaceae	Ramraj	4178
<i>Teramnus labialis</i> (L. f.) Spreng	Papilionaceae	Ramraj	1807
<i>Thunbergia erecta</i> (Benth.) T. Anders.	Acanthaceae	Kandhala	3088
<i>Thysanolaena maxima</i> (Roxb.) Kuntze	Poaceae	Jaroda	2839
<i>Tonningia axillaris</i> (L.) Kuntze	Commelinaceae	Rohana	1673

<i>Torenia indica</i> Saldanha	Scrophulariaceae	Budhana	2495
<i>Trachyspermum ammi</i> (L.) Spreng	Apiaceae	Gordhanpur	2685
<i>Trapa bispinosa</i> Roxb.	Trapaceae	Khatauli	3569
<i>Trianthema portulacastrum</i> L.	Aizoaceae	Rohana	2734
<i>Trianthema triquetra</i> Rottle. & Willd.	Aizoaceae	Purkaji	637
<i>Tribulus terrestris</i> L.	Zygophyllaceae	Mzn City	158
<i>Trichodesma amplixicaule</i> Roth.	Boraginaceae	Gordhanpur	2637
<i>Tridax procambens</i> L.	Asteraceae	Rohana	2707
<i>Trifolium alexandrinum</i> L.	Papilionaceae	Mzn City	198
<i>Trifolium resupinatum</i> L.	Papilionaceae	Nirana	502
<i>Trifolium tomentosum</i> L.	Papilionaceae	Mzn City	381
<i>Trigonella corniculata</i> L.	Papilionaceae	Shamli	5088
<i>Trigonella foenum-graecum</i> L.	Papilionaceae	Titawi	3128
<i>Trigonella polycerata</i> L.	Papilionaceae	Jaroda	3121
<i>Triticum aestivum</i> L.	Poaceae	Mzn City	3530
<i>Triumfetta pillosa</i> Roth.	Tiliaceae	Mzn City	36
<i>Triumfetta rhomboidea</i> Jacq.	Tiliaceae	Mzn City	3764
<i>Tropaeolum majus</i> L.	Tropaeolaceae	Mzn City	356
<i>Uraria picta</i> (Jacq.) Desv.	Papilionaceae	Mzn City	663
<i>Urena lobata</i> L.	Malvaceae	Mansurpur	237
<i>Urochloa panocoides</i> Beauv.	Poaceae	Janshat	1486
<i>Utricularia aurea</i> Lour.	Lentubulariaceae	Jhijnhana	2027
<i>Utricularia inflexa</i> Forsk. Var. <i>stellaris</i> (L.f.) P.Taylor	Lentubulariaceae	Ramraj	3768
<i>Vaccaria pyramidata</i> Medik.	Caryophyllaceae	Budhana	2462
<i>Verbascum chinense</i> (L.) Santapau	Scrophulariaceae	Thanabhawan	2157
<i>Verbascum thapsus</i> L.	Scrophulariaceae	Bahadarpur	4228
<i>Verbena bipinnatifolia</i> Schau. In DC.	Verbanaceae	Mzn City	93
<i>Verbena officinalis</i> L.	Verbanaceae	Mzn City	835
<i>Vernonia cinerea</i> (L.) Less.	Asteraceae	Oon	2321
<i>Veronica anagallis-aquatica</i> L.	Scrophulariaceae	Bahadarpur	3566
<i>Veronica argestris</i> L.	Scrophulariaceae	Thanabhawan	1820
<i>Vetiveria zizanioides</i> (L.) Nash.	Poaceae	Mzn City	662
<i>Vicia faba</i> L.	Papilionaceae	Mzn City	173
<i>Vicia hirsuta</i> (L.) S. F. Gray.	Papilionaceae	Titawi	3123
<i>Vicia sativa</i> L.	Papilionaceae	Charthawal	2154
<i>Vigna angularis</i> (Willd.) Ohwri.	Papilionaceae	Basera	1749
<i>Vigna mungo</i> (L.) Hepper	Papilionaceae	Mohd.Pur	1063
<i>Vigna trilobata</i> (L.) Verdc.	Papilionaceae	Mirapur	397
<i>Vigna unguiculata</i> (L.) Walp.	Papilionaceae	Morna	5036
<i>Viola tricolor</i> L.	Violaceae	Shamli	202
<i>Volutarella ramosa</i> (Roxb.) Santapau	Asteraceae	Shukartal	1042
<i>Volvolupsis nummularia</i> (L.) Roberty.	Convolvulaceae	Rampur	1727
<i>Withania somnifera</i> (L.) Dunal	Solanaceae	Kairana	905
<i>Xanthium strumarium</i> L.	Asteraceae	Gordhanpur	2626

<i>Yucca gloriosa</i> L.	Agavaceae	Mzn City	465
<i>Zea mays</i> L.	Poaceae	Mzn City	4234
<i>Zebrina pendula</i> Schinzl.	Commelinaaceae	Shamli	5099
<i>Zeleya govindia</i> Buch.-Ham.	Aizoaceae	Ramraj	1844
<i>Zeuxine strateumatica</i> (L.) Schltr.	Orchidaceae	Nala	4246
<i>Zingiber officinale</i> Rosc.	Zingiberaceae	Banat	5090
<i>Zornia gibbosa</i> Span.	Papilionaceae	Ramraj	2958

DISCUSSION AND CONCLUSION

The history of taxonomic research of this area goes back hundreds of year when several workers like J. F. Duthie, J.F. Royle etc. collected and described the plants of this region. Recently several workers worked out the Flora of District Muzaffarnagar [6-8]. Our Universities can do excellent work in the selected areas in the neighbourhood of their headquarters [9]. Similarly several suggestions were made by at summer school in taxonomy and Botany, held at kodaikanal in 1962 [10]. Keeping all this in mind an attempt has been made to study of flora District Muzaffarnagar. The vegetation of this area is basically similar to that of the state U.P. and Upper Gangetic Plain, with variation due to its geographic and climatic features. During fields surveys author collected thousands of plants and recorded 885 species. In the present manuscript a total of 577 herbs belonging to 77 families and 321 genera have been enumerated. The genera and species are arranged alphabetically along with their collection number (Table 2).

The common winter weeds of the area are *Ageratum conyzoides* L. *Arenaria serpyllifolia* L. *Bulbostylis barbata* (Rottb.) Clarke, *Carex fedia* Nees, *Cyathocline purpurea* (D.Don) O. Kuntze, *Grangea maderaspatana* (L.) Poir, *Nepeta hindostana* (Roth.) Haines and *Phalaris minor* Retz.

The common rainy season weeds of the area are *Biophytum sensitivum* (L.) DC., *Conyza canadensis* (L.) Croq., *Digeria muricata* (L.) Mart., *Echinochloa frumentacea* L., *Cotula anthemoides* L., *Commelina benghalensis* L., *Urochloa panicoides* Beauv. and *Cyperus spp.*

The common summer season weeds are *Bulbostylis barbata* (Rottb.) Clarke, *Carex fedia* Nees, *Cynodon dactylon* (L.) Pers., *Eclipta prostrata* (L.) L., *Euphorbia prostrata* A. Ait. *Gisekia pharnaceoides* L. *Grangea maderaspatana* (L.) Poir. *Portulaca oleracea* L. and *Nicotiana plumbaginifolia* Viv.

The rare weeds of the area are *Saussurea heteromalla* (D. Don) Hand.-Mazz. *Eleusine coracana* (L.) Gaertn., *Leptochloa chinensis* (L.) Nees, *Achyranthes bidentata* Bl. and *Scirpus supinus* L.

Besides, *Striga euphrasioides* (Vahl.) Benth. and *Orobanche aegyptica* Pers. are the two important parasites of the area and *Argemone ochroleuca* Sweet is a new report for this district.

ACKNOWLEDGEMENT

The author is grateful to the Dr. Devendra Kumar ex reader and head department of Botany C.C.R. (P.G.) College Muzaffarnagar. Thanks are also due to the authorities of DD Herbarium for permitting Herbarium consultation.

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