

Full Length Research Paper

Observations on the Flora of Varanasi District in Uttar Pradesh State of India

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An observational study was undertaken to explore the floristic wealth of Varanasi district which spreads over an area of 1,535 km². A total of 1015 plant species belonging to 601 genera and 116 families were recorded from Varanasi district. The dicotyledons were represented by 785 species belonging to 470 genera and 94 families whereas the monocotyledons were represented by 230 plant species belonging to 131 genera and 22 families. Fabaceae, Asteraceae and Poaceae were the most dominant families of the flora of Varanasi district. The exotic plant species exceeds the number of native plant species while the plants of perennial duration were greater in number than plants of annual and biennial durations in the flora of Varanasi district.

Keywords: Exotic flora, Eastern Uttar Pradesh, Indo-Gangetic Plains, Native flora, Varanasi district

INTRODUCTION

Flora which refers to botanical composition of a region where names of different species are taken into account is governed by the climatic and edaphic conditions of that region. Flora indicates the way different species have come to occur in a region. Studies have been conducted to explore the flora of India (Hooker, 1904; Jain 1983; Jain and Rao, 1997). Uttar Pradesh is one of the biggest state of India is divided into several regions such as Western Uttar Pradesh, South Western Uttar Pradesh, Central Uttar Pradesh and Eastern Uttar Pradesh. Several studies have been conducted to assess the floristic wealth of various districts of South Western Uttar Pradesh (Trivedi et al., 1979; Kanodia et al., 1983; Sinha, 1990; Verma and Shukla, 1997; Verma and Ranjan, 1995; Narain, 2010) and Baghpat district of Western Uttar Pradesh (Ahamed and Gupta, 2010; Tomar et al., 2008). However, no information is yet available about the flora of Varanasi district which lies in Eastern Uttar Pradesh. Therefore, the present study was undertaken with objective to assess the flora of Varanasi district which belongs to Indo-Gangetic plain physiographic division of India. The following questions were addressed in the study: (1) how many species of angiospermic plants are hosted by the Varanasi district? (2) which families dominate the flora of Varanasi district? (3) plant species of which origin status dominate the flora of Varanasi district? and; (4) plant species of which

duration dominate the flora of Varanasi district?

MATERIAL AND METHODS

Site description

Varanasi district is located in the middle Ganges valley of North India, in the Eastern part of the state of Uttar Pradesh, bordering the districts of Jaunpur in the north, Ghazipur in the north-east, Chandauli in the east, Mirzapur in the south and Bhadohi in the west. The total area of the district is 1,535 km² with population of 3.45 million persons. Varanasi, Pindra and Rajatalab are three tahsils in Varanasi district. The urban agglomeration lies between 25° 14' – 25° 23.5' N latitude and 82° 56' – 83° 03' E longitude.

The soil is alluvial type formed by the deposition of sediments of Ganges River. Being located in the Indo-Gangetic Plains of North India the soil is very fertile as the low level floods continuously replenish the soil. Moreover, the soil is sandy loam in texture.

The climate is Tropical monsoonal type with three distinct seasons; the cold (November to February), the hot (March to mid June) and the rainy (mid-June to September), while October is regarded as strictly transitional month. The diurnal range of temperature

ranges as average between 13°C and 14.5°C in the cold and hot months, respectively. The highest monthly temperature is recorded in May, varying between 32°C and 42°C. The annual rainfall is around 100 cm of which 90% occurs in rainy season (Singh and Rana, 2006).

Field survey

An intensive field survey was initiated from July 2009 onward to observe and collect the various plant species growing in the Varanasi district of the Uttar Pradesh state of India. During survey visits were made to each and every corner of the district to record and collect the plant species. The field observations and collection process was completed by the June 2015. The collected specimens were identified through various sources (Hooker, 1875-1897; Duthie, 1903-1922; Bor, 1960; Kirtikar and Basu, 1975). The APG III (2009) classification was followed for arranging the taxa to families.

RESULTS AND DISCUSSION

The various plant species collected from Varanasi district are presented in the Table 1. A total of 1015 angiospermic plant species were recorded from Varanasi district belonging to 601 genera and 116 families. The dicotyledons were represented by 785 species belonging to 470 genera and 94 families whereas monocotyledons were represented by 230 plant species belonging to 131 genera and 22 families (Table 2). The number of plant species recorded in the present study of Varanasi district was much greater compared to studies conducted on the flora of the other districts in the Uttar Pradesh state of India (Mishra and Verma, 1992; Narain, 2010; Ahamed and Gupta, 2010).

The monocotyledons to dicotyledons ratio is 1:4.27 for families; 1:3.58 for genera and 1:3.41 for species. Furthermore, the ratio of the total number of genera to species is 1:1.69, which is lower in comparison to the ratio reported by Maheshwari (1963) for the Gangetic Plains region of India (1:2.2).

The maximum number of plant species were represented by the Fabaceae family followed by Asteraceae and Poaceae families (Table 3). Thus the study clearly indicates that Fabaceae, Asteraceae and Poaceae are the three top most dominant families of the flora of the Varanasi district. Studies conducted on the flora of Banda district (Sinha, 1990), Lalitpur district (Verma and Ranjan, 1995), Jalaun district (Verma and Shukla, 1997), Hamirpur and Mahoba districts (Narain, 2010) and Baghpat district (Ahamed and Gupta, 2010) in Uttar Pradesh state of India also reports the dominance of Fabaceae, Asteraceae and Poaceae families. However, study on the flora of whole India indicates the dominance of Orchidaceae, Fabaceae and Poaceae

families (Hooker, 1904). The present study suggests that besides Fabaceae, Asteraceae and Poaceae, the other dominant families of the flora of Varanasi district includes Cyperaceae, Malvaceae, Euphorbiaceae, Amaranthaceae, Apocynaceae, Lamiaceae and Acanthaceae (Table 3). Hooker (1904) also reported the dominance of Cyperaceae, Malvaceae, Euphorbiaceae, Acanthaceae and Lamiaceae in addition to Fabaceae, Asteraceae and Poaceae families in the flora of Gangetic Plain of India. Scrophulariaceae and Convolvulaceae were the other two dominant families reported by him which are missing from the present study. Furthermore, the present study reveals that of top ten dominating families only two i.e. Poaceae and Cyperaceae were represented by monocotyledonous families. This result of the present study was in conformity to the findings that Poaceae and Cyperaceae are the only monocotyledonous families which ranks among the top ten families of the flora of Gangetic Plain of India (Hooker, 1904) and in other districts of the Uttar Pradesh state of India (Sinha, 1990; Verma and Ranjan, 1993; Verma and Shukla, 1997; Narain, 2010; Ahamed and Gupta, 2010).

The analysis on origin status of the flora of Varanasi district reveals that 458 plant species were represented by the native species, while 557 plant species were represented by the exotic species. Thus it is evident from the study that the floristic wealth of the Varanasi district is dominated by the exotic species. Non-native plant species have become component of the flora of most regions of the world within last five centuries as a result of tremendous species exchange between the continents and vegetation transformation by human beings (Nagar et al., 2004). Himalayan and Peninsular regions of India are poor in exotic flora while Indo-Gangetic Plains and Thar Desert regions are rich in exotic flora (Ahmad, 1999). Since Varanasi district belongs to Indo-Gangetic Plains physiographic division of India, hence this could be the probable reason behind abundance of exotic plant species in the flora of Varanasi district.

The analysis on life duration reveals that of the total plant species recorded from the Varanasi district, 378 plant species were represented by the annuals while 620 plant species were represented by the perennials. Only 17 plant species were represented by the biennials. Thus the plants of perennial duration were greater in number compared to the plants of annual and biennial durations in the flora of Varanasi district.

Several woody species observed in the Varanasi district like *Butea monosperma*, *Holarrhena pubescens*, *Madhuca longifolia*, *Holoptelea integrifolia*, *Melia azedarach*, *Nyctanthes arbor-tristis*, *Phyllanthus emblica*, *Terminalia arjuna*, *Terminalia bellerica*, *Woodfordia fruticosa*, *Ziziphus nummularia* and *Dendrocalamus strictus* are the chief component species of the tropical dry deciduous forest of the locality (Jha and Singh, 1992).

Several plant species recorded from the Varanasi district belongs to the threatened category of flora. These include *Alocasia sandariana*, *Aloe vera*, *Celastrus paniculatus*, *Catharanthus roseus*, *Cephalocereus*

quadriflorus, *Mammillaria bombycina*, *Rhipsalis prismatica*, *Euphorbia antiquorum*, *Euphorbia caducifolia*, *Euphorbia cattimandoo*, *Euphorbia lactea*, *Euphorbia milii*, *Euphorbia neriifolia*, *Euphorbia nivulia*,

Table 1. List of plant species recorded from Varanasi district in Uttar Pradesh state of India

S. No.	Family / Plant species	Habit	Origin status	Duration
Dicotyledons				
Acanthaceae				
1.	<i>Adhatoda zeylanica</i> L.	Shrub	Native	Perennial
2.	<i>Andrographis paniculata</i> Nees	Herb	Native	Annual
3.	<i>Aphelandra squarrosa</i> Nees	Shrub	Exotic	Perennial
4.	<i>Barleria cristata</i> L.	Undershrub	Native	Perennial
5.	<i>Barleria prionitis</i> L.	Herb	Native	Annual
6.	<i>Blepharis boerhaviaefolia</i> Pers.	Herb	Native	Annual
7.	<i>Ecbolium viride</i> (Flors.) Alston	Herb	Native	Annual
8.	<i>Elytraria acaulis</i> (L. f.) Lindau	Herb	Native	Perennial
9.	<i>Eranthemum pulchellum</i> Andr.	Shrub	Native	Perennial
10.	<i>Fittonia albivensis</i> Coem.	Herb	Exotic	Perennial
11.	<i>Hygrophila auriculata</i> Schumach.	Herb	Native	Annual
12.	<i>Hygrophila polysperma</i> Anderson	Herb	Native	Perennial
13.	<i>Justicia adhatoda</i> L.	Shrub	Native	Perennial
14.	<i>Justicia gendarussa</i> Burm.	Shrub	Exotic	Perennial
15.	<i>Justicia diffusa</i> Willd.	Herb	Exotic	Perennial
16.	<i>Justicia simplex</i> D. Don	Herb	Exotic	Perennial
17.	<i>Peristrophe bicalyculata</i> Nees	Herb	Native	Annual
18.	<i>Ruellia tuberosa</i> L.	Herb	Exotic	Biennial
19.	<i>Ruellia prostrata</i> Poir.	Herb	Exotic	Annual
20.	<i>Rungia parviflora</i> (L.) Nees	Herb	Native	Annual
21.	<i>Rungia repens</i> Nees	Herb	Native	Annual
22.	<i>Strobilanthes anisophyllus</i> T. Anders	Shrub	Exotic	Perennial
23.	<i>Thunbergia erecta</i> T. Anders	Undershrub	Exotic	Perennial
24.	<i>Thunbergia fragrans</i> Roxb.	Herb	Native	Perennial
25.	<i>Thunbergia grandiflora</i> (Roxb. ex Rottler)	Woody climber	Native	Perennial
Aizoaceae				
1.	<i>Trianthema crystallina</i> (Forssk.) Vahl	Herb	Exotic	Annual
2.	<i>Trianthema portulacastrum</i> L.	Herb	Native	Annual
Amaranthaceae				
1.	<i>Achyranthes aspera</i> L.	Herb	Native	Perennial
2.	<i>Aerva javanica</i> (Burm. F.) Schult	Herb	Exotic	Perennial
3.	<i>Aerva lanata</i> (L.) Juss. Ex Schult	Herb	Native	Perennial
4.	<i>Alternanthera ficoidea</i> (L.) P. Beauv.	Herb	Exotic	Perennial
5.	<i>Alternanthera philoxeroides</i> Griseb.	Herb	Exotic	Perennial
6.	<i>Alternanthera sessilis</i> R. Br.	Herb	Exotic	Perennial
7.	<i>Amaranthus blitum</i> L.	Herb	Native	Annual
8.	<i>Amaranthus polygamosus</i> L.	Herb	Native	Perennial
9.	<i>Amaranthus spinosus</i> L.	Herb	Exotic	Annual
10.	<i>Amaranthus tenuifolius</i> Willd.	Herb	Exotic	Annual
11.	<i>Amaranthus tricolor</i> L.	Herb	Exotic	Perennial
12.	<i>Amaranthus viridis</i> L.	Herb	Native	Perennial
13.	<i>Bassia scoparia</i> (L.) A. J. Scott	Herb	Exotic	Perennial
14.	<i>Beta vulgaris</i> L.	Herb	Exotic	Biennial
15.	<i>Celosia argentea</i> L.	Herb	Native	Annual
16.	<i>Celosia cristata</i> L.	Herb	Exotic	Annual
17.	<i>Chenopodium album</i> L.	Herb	Exotic	Annual
18.	<i>Chenopodium murale</i> (L.) S. Fuentes, Votila & Borsch	Herb	Exotic	Annual
19.	<i>Deeringia amarantoides</i> (Lam.) Merri.	Woody climber	Native	Perennial
20.	<i>Digera arvensis</i> Forssk.	Herb	Native	Annual
21.	<i>Dysphania ambrosioides</i> (L.) Mosyakin & Clements	Herb	Exotic	Annual

22.	<i>Gomphrena celosioides</i> Mart.	Herb	Exotic	Annual
23.	<i>Gomphrena globosa</i> L.	Herb	Exotic	Annual
24.	<i>Iresine herbstii</i> Hook. ex Lindl.	Herb	Exotic	Perennial
25.	<i>Iresine lindenii</i> Van Houttee	Herb	Exotic	Perennial
26.	<i>Nothosaerva brachiata</i> (L.) Wt.	Herb	Native	Annual
27.	<i>Pupalia lappacea</i> (L.) Juss.	Undershrub	Native	Perennial
28.	<i>Spinacea oleracea</i> L.	Herb	Exotic	Annual
29.	<i>Suaeda maritima</i> (L.) Dumort	Undershrub	Exotic	Annual
Anacardiaceae				
1.	<i>Anacardium occidentale</i> L.	Tree	Exotic	Perennial
2.	<i>Buchanania latifolia</i> Roxb.	Tree	Native	Perennial
3.	<i>Mangifera indica</i> L.	Tree	Native	Perennial
4.	<i>Spondias pinnata</i> (Koen.) Kurz	Tree	Native	Perennial
Annonaceae				
1.	<i>Annona squamosa</i> L.	Tree	Exotic	Perennial
2.	<i>Artabotrys odoratissimus</i> R. Br.	Woody climber	Native	Perennial
3.	<i>Polyalthia longifolia</i> (Sonn.) Thw. var. pendula	Tree	Native	Perennial
Apiaceae				
1.	<i>Anethum graveolens</i> DC.	Herb	Exotic	Annual
2.	<i>Apium graveolens</i> L.	Herb	Exotic	Biennial
3.	<i>Carum copticum</i> (L.) Link	Herb	Native	Perennial
4.	<i>Centella asiatica</i> (L.) Urban	Herb	Native	Annual
5.	<i>Coriandrum sativum</i> L.	Herb	Exotic	Annual
6.	<i>Daucus carota</i> L.	Herb	Exotic	Annual
7.	<i>Foeniculum vulgare</i> Mill.	Herb	Exotic	Perennial
8.	<i>Hydrocotyle javanica</i> Thunb.	Herb	Native	Annual
9.	<i>Hydrocotyle sibthorpioides</i> Lam.	Herb	Native	Annual
10.	<i>Trachyspermum ammi</i> (L.) Sprague	Herb	Exotic	Annual
Apocynaceae				
1.	<i>Adenium obesum</i> (Forssk.) Roem. & Schult	Shrub	Exotic	Perennial
2.	<i>Allamanda cathartica</i> L.	Woody climber	Exotic	Perennial
3.	<i>Allamanda neriifolia</i> Hook.	Woody climber	Exotic	Perennial
4.	<i>Allamanda violacea</i> Gardn. & Field.	Woody climber	Exotic	Perennial
5.	<i>Alstonia scholaris</i> R. Br.	Tree	Native	Perennial
6.	<i>Calotropis gigantea</i> (L.) R. Br. ex. Ait.	Shrub	Native	Perennial
7.	<i>Calotropis procera</i> (Ait.) R. Br.	Herb	Native	Perennial
8.	<i>Carissa carandas</i> L.	Shrub	Exotic	Perennial
9.	<i>Catharanthus roseus</i> G. Don	Herb	Exotic	Perennial
10.	<i>Cryptostegia grandiflora</i> R. Br.	Shrub	Exotic	Perennial
11.	<i>Ervatamia coronaria</i> (Jacq.) Stapf	Shrub	Native	Perennial
12.	<i>Hemidesmus indicus</i> (L.) R. Br.	Shrub	Native	Perennial
13.	<i>Holarrhena pubescens</i> Benth.	Tree	Native	Perennial
14.	<i>Ichnocarpus frutescens</i> (L.) W. T. Ait.	Shrub	Native	Perennial
15.	<i>Leptadenia reticulata</i> Wt. & Arn.	Shrub	Native	Perennial
16.	<i>Nerium indicum</i> L.	Shrub	Native	Perennial
17.	<i>Nerium oleander</i> L.	Shrub	Exotic	Perennial
18.	<i>Pergularia daemia</i> (Forssk.) Chiov.	Woody climber	Native	Annual
19.	<i>Plumeria acuminata</i> Ait.	Shrub	Exotic	Perennial
20.	<i>Plumeria alba</i> L.	Shrub	Exotic	Perennial
21.	<i>Plumeria rubra</i> L.	Tree	Exotic	Perennial
22.	<i>Rauvolfia serpentina</i> Benth.	Shrub	Native	Perennial
23.	<i>Stapelia gigantea</i> NE R. Br.	Herb	Exotic	Perennial
24.	<i>Thevetia peruviana</i> Schum.	Shrub	Exotic	Perennial
25.	<i>Telosma pallida</i> (Roxb.)	Shrub	Native	Perennial
26.	<i>Trachelospermum jasminoides</i> (Lindl.) Lem.	Woody climber	Exotic	Perennial
27.	<i>Vallaris solanacea</i> (Roth.) Kuntze	Woody climber	Native	Perennial
28.	<i>Wrightia tinctoria</i> (Roxb.) R. Br.	Tree	Native	Perennial
Araliaceae				
1.	<i>Aralia digitata</i> Roxb.	Shrub	Native	Perennial
2.	<i>Aralia elata</i> (Miq.) Seem	Shrub	Exotic	Perennial
3.	<i>Polycias balfouriana</i> (Andre) L. H. Bailey	Shrub	Exotic	Perennial
4.	<i>Schefflera actinophylla</i> (Endl.) Harms	Tree	Exotic	Perennial
Aristolochiaceae				
1.	<i>Aristolochia indica</i> L.	Herb	Native	Perennial
2.	<i>Aristolochia littoralis</i> D. Parodi	Herb	Exotic	Perennial
Asteraceae				
1.	<i>Acanthospermum hispidum</i> DC.	Herb	Exotic	Annual

2.	<i>Acmella oleracea</i> (L.) R. K. Jansen	Herb	Exotic	Annual
3.	<i>Acmella paniculata</i> (Wall. ex DC.) R. K. Jansen	Herb	Native	Annual
4.	<i>Acmella uliginosa</i> (Sweet) Cass.	Herb	Exotic	Annual
5.	<i>Adenostemma viscosum</i> Forst.	Herb	Exotic	Annual
6.	<i>Ageratum conyzoides</i> L.	Herb	Exotic	Annual
7.	<i>Amberboa ramosa</i> (Roxb.) Jafri	Herb	Native	Annual
8.	<i>Artemisia annua</i> L.	Herb	Exotic	Annual
9.	<i>Artemisia scoparia</i> Waldst. & Kit.	Herb	Exotic	Annual
10.	<i>Aster amellus</i> L.	Herb	Exotic	Annual
11.	<i>Aster grandiflorus</i> L.	Herb	Exotic	Annual
12.	<i>Bidens biternata</i> (Lour.) Merr. & Sherff	Herb	Exotic	Annual
13.	<i>Blainvillea acmella</i> (L.) Philipson	Herb	Exotic	Annual
14.	<i>Blumea aromatica</i> DC.	Herb	Native	Perennial
15.	<i>Blumea eriantha</i> DC.	Herb	Native	Perennial
16.	<i>Blumea indica</i> L.	Herb	Native	Annual
17.	<i>Blumea lacera</i> DC.	Herb	Native	Annual
18.	<i>Blumea laciniata</i> DC.	Herb	Native	Perennial
19.	<i>Blumea mollis</i> Merr.	Herb	Native	Perennial
20.	<i>Blumea obliqua</i> (L.) Druce	Herb	Native	Perennial
21.	<i>Blumea oxyodonta</i> DC.	Herb	Native	Annual
22.	<i>Caesulia axillaris</i> Roxb.	Herb	Native	Annual
23.	<i>Calendula officinalis</i> L.	Herb	Exotic	Annual
24.	<i>Carthamus oxycantha</i> M. Bieb	Herb	Native	Annual
25.	<i>Carthamus tinctorius</i> L.	Herb	Exotic	Annual
26.	<i>Centipeda minima</i> (L.) R. Br. & Asch.	Herb	Native	Annual
27.	<i>Centauria moschata</i> L.	Herb	Exotic	Annual
28.	<i>Chrysanthemum carinatum</i> L.	Herb	Exotic	Annual
29.	<i>Chrysanthemum cinerariaefolium</i> Vis.	Herb	Exotic	Annual
30.	<i>Chrysanthemum coronarium</i> L.	Herb	Exotic	Annual
31.	<i>Chrysanthemum morifolium</i> Ramat	Herb	Exotic	Annual
32.	<i>Cichorium intybus</i> L.	Herb	Exotic	Annual
33.	<i>Cirsium arvense</i> (L.) Scop.	Herb	Exotic	Perennial
34.	<i>Cnicus arvensis</i> Hoffm.	Herb	Exotic	Annual
35.	<i>Conyza bonariensis</i> (L.) Cronquist	Herb	Exotic	Annual
36.	<i>Conyza canadensis</i> (L.) Cronquist	Herb	Exotic	Annual
37.	<i>Cosmos bipinnatus</i> Cav.	Herb	Exotic	Perennial
38.	<i>Dahlia pinnata</i> Cav.	Herb	Exotic	Annual
39.	<i>Echinops echinatus</i> Roxb.	Herb	Native	Annual
40.	<i>Eclipta alba</i> Hask.	Herb	Native	Annual
41.	<i>Elephantopus scaber</i> L.	Herb	Native	Annual
42.	<i>Gaillardia pulchella</i> Foug.	Herb	Exotic	Annual
43.	<i>Galinsoga parviflora</i> Cav.	Herb	Exotic	Annual
44.	<i>Gerbera jamesonii</i> Bolus ex. Hooker. F.	Herb	Exotic	Annual
45.	<i>Glossocardia bosvallea</i> DC.	Herb	Native	Annual
46.	<i>Gnaphalium indicum</i> L.	Herb	Exotic	Annual
47.	<i>Gnaphalium polycaulon</i> Pers.	Herb	Native	Annual
48.	<i>Gnaphalium purpureum</i> L.	Herb	Exotic	Annual
49.	<i>Guizotia abyssinica</i> Cass.	Herb	Exotic	Annual
50.	<i>Helianthus annuus</i> L.	Herb	Exotic	Annual
51.	<i>Helianthus tuberosus</i> L.	Herb	Exotic	Perennial
52.	<i>Helichrysum luteoalbum</i> (L.) Rchb.	Herb	Exotic	Annual
53.	<i>Lactuca sativa</i> L.	Herb	Exotic	Annual
54.	<i>Laggera aurita</i> (L.) DC.	Herb	Native	Annual
55.	<i>Launaea procumbens</i> (Roxb.) Eamayya & Rajagopal	Herb	Native	Perennial
56.	<i>Parthenium hysterophorus</i> L.	Herb	Exotic	Perennial
57.	<i>Pluchea lanceolata</i> C. B. Clarke	Herb	Exotic	Annual
58.	<i>Pulicaria foliolosa</i> DC.	Herb	Native	Annual
59.	<i>Sonchus arvensis</i> L.	Herb	Exotic	Annual
60.	<i>Sonchus asper</i> (L.) Hill.	Herb	Exotic	Annual
61.	<i>Sonchus oleraceus</i> L.	Herb	Exotic	Annual
62.	<i>Spilanthes ciliata</i> Kunth	Herb	Exotic	Perennial
63.	<i>Sphaeranthus indicus</i> L.	Herb	Exotic	Annual
64.	<i>Stevia rebaudiana</i> (Bertoni) Bertoni	Herb	Exotic	Annual
65.	<i>Tagetes erecta</i> L.	Herb	Exotic	Annual
66.	<i>Tagetes patula</i> L.	Herb	Exotic	Annual
67.	<i>Taraxacum officinale</i> Webb.	Herb	Exotic	Annual
68.	<i>Tridax procumbens</i> L.	Herb	Exotic	Annual

69.	<i>Vernonia anthelmintica</i> (L.) Willd.	Herb	Native	Perennial
70.	<i>Vernonia cinerea</i> (L.) Less.	Herb	Native	Perennial
71.	<i>Vicoa indica</i> (L.) DC.	Herb	Native	Annual
72.	<i>Volutarella divaricata</i> Benth.	Herb	Exotic	Annual
73.	<i>Xanthium strumarium</i> L.	Herb	Native	Annual
74.	<i>Zinnia elegans</i> Jacq.	Herb	Exotic	Annual
75.	<i>Zinnia linearis</i> Benth.	Herb	Exotic	Annual
Balsaminaceae				
1.	<i>Impatiens balsamina</i> L.	Herb	Native	Annual
Bignoniaceae				
1.	<i>Campsis grandiflora</i> (Thunb.) K. Schum.	Woody climber	Exotic	Perennial
2.	<i>Campsis radicans</i> Seem.	Woody climber	Exotic	Perennial
3.	<i>Crescentia cujete</i> L.	Tree	Exotic	Perennial
4.	<i>Dolichandra unguis-cati</i> (L.) Miers	Woody climber	Exotic	Perennial
5.	<i>Jacaranda mimosaeifolia</i> D. Don	Tree	Exotic	Perennial
6.	<i>Kigelia africana</i> (Lam.) Benth.	Tree	Exotic	Perennial
7.	<i>Mansoa alliacea</i> Gentry.	Woody climber	Exotic	Perennial
8.	<i>Millingtonia hortensis</i> L.	Tree	Exotic	Perennial
9.	<i>Pyrostegia venusta</i> Miers	Shrub	Exotic	Perennial
10.	<i>Tabebuia spectabilis</i> Nicholas	Tree	Exotic	Perennial
11.	<i>Tecoma capensis</i> (Thunb.) Lindl.	Woody climber	Exotic	Perennial
12.	<i>Tecoma stans</i> (L.) H. B. & K.	Shrub	Exotic	Perennial
13.	<i>Tecomella undulata</i> D. Don	Tree	Native	Perennial
Boraginaceae				
1.	<i>Arnebia hispidissima</i> DC.	Herb	Exotic	Annual
2.	<i>Coldenia procumbens</i> L.	Herb	Native	Annual
3.	<i>Cordia dichotoma</i> G. Forst	Tree	Native	Perennial
4.	<i>Cynoglossum lanceolatum</i> Forssk.	Herb	Native	Biennial
5.	<i>Ehretia aspera</i> Willd.	Tree	Native	Perennial
6.	<i>Ehretia laevis</i> Roxb.	Tree	Native	Perennial
7.	<i>Heliotropium indicum</i> L.	Herb	Exotic	Annual
8.	<i>Heliotropium strigosum</i> Willd.	Herb	Exotic	Annual
9.	<i>Heliotropium supinum</i> L.	Herb	Native	Annual
10.	<i>Trichodesma indicum</i> R. Br.	Herb	Exotic	Annual
Brassicaceae				
1.	<i>Brassica alba</i> Boiss.	Herb	Exotic	Annual
2.	<i>Brassica campestris</i> L.	Herb	Exotic	Annual
3.	<i>Brassica juncea</i> (L.) Czern. & Coss.	Herb	Exotic	Annual
4.	<i>Brassica napus</i> L.	Herb	Exotic	Annual
5.	<i>Brassica nigra</i> (L.) Koch.	Herb	Exotic	Annual
6.	<i>Brassica oleracea</i> L. var. <i>gongyloides</i> L.	Herb	Exotic	Biennial
7.	<i>Brassica oleracea</i> L. var. <i>acephala</i> DC.	Herb	Exotic	Annual
8.	<i>Brassica oleracea</i> L. var. <i>capitata</i> L.	Herb	Exotic	Biennial
9.	<i>Brassica oleracea</i> L. var. <i>gemmifera</i> Zenker	Herb	Exotic	Biennial
10.	<i>Brassica oleracea</i> L. var. <i>botrytis</i> L.	Herb	Exotic	Biennial
11.	<i>Brassica oleracea</i> L. var. <i>italica</i> Plenck	Herb	Exotic	Annual
12.	<i>Brassica rapa</i> L.	Herb	Exotic	Biennial
13.	<i>Coronopus didymus</i> (L.) Smith.	Herb	Exotic	Biennial
14.	<i>Eruca sativus</i> Mill.	Herb	Exotic	Annual
15.	<i>Iberis amara</i> L.	Herb	Exotic	Annual
16.	<i>Lepidium sativum</i> L.	Herb	Exotic	Annual
17.	<i>Raphanus sativus</i> L.	Herb	Exotic	Annual
18.	<i>Rorippa indica</i> (L.) Hiern	Herb	Exotic	Perennial
19.	<i>Rorippa montana</i> Small.	Herb	Exotic	Perennial
20.	<i>Sisymbrium irio</i> L.	Herb	Exotic	Annual
Cactaceae				
1.	<i>Cereus hildmannianus</i> K. Schum.	Shrub	Exotic	Perennial
2.	<i>Cereus repandus</i> Haw.	Shrub	Exotic	Perennial
3.	<i>Cephalocereus apicicephalum</i> E. Y. Dawson	Shrub	Exotic	Perennial
4.	<i>Cephalocereus quadricentralis</i> E. Y. Dawson	Shrub	Exotic	Perennial
5.	<i>Echinocereus engelmannii</i> (Parry ex Engelm.) Lem.	Shrub	Exotic	Perennial
6.	<i>Echinocereus reichenbachii</i> (Teischeck ex Walp.) Hagge f.	Shrub	Exotic	Perennial
7.	<i>Echinocereus triglochidiatus</i> Engelm.	Shrub	Exotic	Perennial
8.	<i>Lepismium cruciform</i> (Vellozo) Miq.	Shrub	Exotic	Perennial
9.	<i>Mammillaria bombycina</i> Quehl	Shrub	Exotic	Perennial
10.	<i>Mammillaria spinosissima</i> (Kuntze) Lem.	Shrub	Exotic	Perennial
11.	<i>Opuntia microdasys</i> (Lehm.) Pfeiff	Shrub	Exotic	Perennial

12.	<i>Opuntia stricta</i> Haw.	Shrub	Exotic	Perennial
13.	<i>Opuntia vulgaris</i> Mill.	Shrub	Native	Perennial
14.	<i>Rhipsalis prismatica</i> (Lem.) Rumlper	Shrub	Exotic	Perennial
Cannabaceae				
1.	<i>Cannabis sativa</i> L.	Herb	Exotic	Annual
2.	<i>Trema orientalis</i> Blume	Tree	Native	Perennial
Capparaceae				
1.	<i>Capparis decidua</i> (Forssk.) Edgew.	Shrub	Native	Perennial
2.	<i>Capparis spinosa</i> L.	Shrub	Native	Perennial
3.	<i>Crataeva nurvala</i> Buch.-Ham.	Tree	Native	Perennial
4.	<i>Gynandropsis pentaphylla</i> L.	Herb	Native	Annual
5.	<i>Maerua arenaria</i> Hk. F & Th.	Woody climber	Native	Perennial
Caricaceae				
1.	<i>Carica papaya</i> L.	Herb	Exotic	Perennial
Caryophyllaceae				
1.	<i>Arenaria serpyllifolia</i>	Herb	Exotic	Annual
2.	<i>Dianthus caryophyllus</i> L.	Herb	Exotic	Annual
3.	<i>Polycarpaea corymbosa</i> (L.) Lamk.	Herb	Native	Annual
4.	<i>Polycarpon prostratum</i> (Forssk.) Pax	Herb	Exotic	Annual
5.	<i>Spergula arvensis</i> L.	Herb	Exotic	Annual
6.	<i>Stellaria aquatica</i> (L.) Scop.	Herb	Exotic	Annual
7.	<i>Vaccaria pyramidata</i> L.	Herb	Exotic	Annual
Casuarinaceae				
1.	<i>Allocasuarina littoralis</i> (Salisb.) Johson	Tree	Exotic	Perennial
2.	<i>Casuarina equisetifolia</i> L.	Tree	Exotic	Perennial
Celastraceae				
1.	<i>Celastrus paniculatus</i> Willd.	Woody climber	Native	Perennial
Ceratophyllaceae				
1.	<i>Ceratophyllum demersum</i> L.	Herb	Exotic	Annual
Cleomaceae				
1.	<i>Cleome viscosa</i> L.	Herb	Native	Annual
Combretaceae				
1.	<i>Combretum indicum</i> (L.) De Filippis	Shrub	Native	Perennial
2.	<i>Terminalia arjuna</i> Wt. & Arn.	Tree	Native	Perennial
3.	<i>Terminalia bellerica</i> (Gaertn.) Roxb.	Tree	Native	Perennial
4.	<i>Terminalia catappa</i> L.	Tree	Exotic	Perennial
5.	<i>Terminalia chebula</i> Retz.	Tree	Native	Perennial
6.	<i>Terminalia tomentosa</i> Wt. & Arn.	Tree	Native	Perennial
Convolvulaceae				
1.	<i>Argyrea nervosa</i> (Burm. F.) Boj.	Shrub	Native	Perennial
2.	<i>Convolvulus arvensis</i> L.	Herb	Exotic	Annual
3.	<i>Convolvulus pluricaulis</i> Choisy	Herb	Native	Annual
4.	<i>Cuscuta reflexa</i> Roxb.	Herb	Native	Perennial
5.	<i>Evolvulus alsinoides</i> L.	Herb	Native	Annual
6.	<i>Evolvulus nummularius</i> L.	Herb	Native	Annual
7.	<i>Ipomoea aquatica</i> Forssk.	Herb	Native	Annual
8.	<i>Ipomoea batata</i> Lamk.	Herb	Exotic	Annual
9.	<i>Ipomoea coptica</i> (L.) Roth. ex. Roem. & Schult	Herb	Exotic	Annual
10.	<i>Ipomoea eriocarpa</i> R. Br.	Herb	Exotic	Annual
11.	<i>Ipomoea fistulosa</i> Mart.	Shrub	Exotic	Perennial
12.	<i>Ipomoea pes-tigridis</i> L.	Herb	Exotic	Perennial
13.	<i>Ipomoea pilosa</i> Sweet	Herb	Exotic	Perennial
14.	<i>Ipomoea turbinata</i> Lag.	Herb	Exotic	Annual
15.	<i>Ipomoea quamoclit</i> L.	Herb	Exotic	Perennial
16.	<i>Merremia tridentata</i> (L.) Hallier. F.	Herb	Exotic	Perennial
17.	<i>Opeculina turpethum</i> (L.) Silva Manso	Herb	Native	Perennial
18.	<i>Rivea hypocrateriformis</i> Choisy	Shrub	Native	Perennial
Crassulaceae				
1.	<i>Dudleya farinosa</i> (Lindl.) Britt & Rose	Herb	Exotic	Perennial
2.	<i>Kalanchoe daigremontianum</i> Raym.-Hamet & H. Perrier	Herb	Exotic	Perennial
3.	<i>Kalanchoe pinnata</i> (Lam.) Pers.	Herb	Exotic	Perennial
Cucurbitaceae				
1.	<i>Benincasa hispida</i> Thunb.	Herb	Native	Annual
2.	<i>Bryonia dioica</i> Jacq.	Herb	Exotic	Perennial
3.	<i>Citrullus colocynthis</i> (L.) Schard.	Herb	Exotic	Annual
4.	<i>Coccinia grandis</i> (L.) Voigt	Herb	Native	Annual
5.	<i>Cucumis sativus</i> L.	Herb	Exotic	Annual

6.	<i>Cucurbita maxima</i> Duchense	Herb	Exotic	Perennial
7.	<i>Cucurbita moschata</i> Duchense ex Poit	Herb	Exotic	Perennial
8.	<i>Lagenaria siceraria</i> (Mol.) Standl.	Herb	Exotic	Perennial
9.	<i>Luffa acutangula</i> (L.) Roxb.	Herb	Native	Annual
10.	<i>Luffa cylindrica</i> (L.) Roem.	Herb	Exotic	Annual
11.	<i>Melothria maderaspatana</i> (L.) Cogn.	Herb	Native	Annual
12.	<i>Momordica balsamina</i> L.	Hreb	Native	Annual
13.	<i>Momordica charantia</i> L.	Herb	Native	Annual
14.	<i>Trichosanthes cucumerina</i> L.	Herb	Native	Annual
15.	<i>Trichosanthes dioica</i> Roxb.	Herb	Native	Perennial
	Dilleniaceae			
1.	<i>Dillenia indica</i> L.	Tree	Native	Perennial
	Ebenaceae			
1.	<i>Diospyros embryopteris</i> Pers.	Tree	Native	Perennial
2.	<i>Diospyros melanoxyton</i> Roxb.	Tree	Native	Perennial
3.	<i>Diospyros montana</i> Roxb.	Tree	Native	Perennial
	Elaeocarpaceae			
1.	<i>Elaeocarpus ganitrus</i> Roxb.	Tree	Native	Perennial
	Euphorbiaceae			
1.	<i>Acalypha indica</i> L.	Herb	Native	Annual
2.	<i>Acalypha hispida</i> Burm. F.	Shrub	Exotic	Perennial
3.	<i>Acalypha wilkesiana</i> Muell.-Arg.	Shrub	Exotic	Perennial
4.	<i>Chrozophora prostrata</i> Dalz.	Herb	Native	Annual
5.	<i>Chrozophora rotleri</i> Juss.	Herb	Native	Annual
6.	<i>Codiaeum variegatum</i> Blume	Shrub	Exotic	Perennial
7.	<i>Croton bonplandianus</i> Baill	Herb	Exotic	Annual
8.	<i>Euphorbia antiquorum</i> L.	Tree	Native	Perennial
9.	<i>Euphorbia caducifolia</i> L.	Shrub	Native	Perennial
10.	<i>Euphorbia cattimando</i> Elliott ex. Wight	Shrub	Native	Perennial
11.	<i>Euphorbia clarkeana</i> Hook. F.	Shrub	Exotic	Perennial
12.	<i>Euphorbia dracunculoides</i> Lam.	Herb	Native	Annual
13.	<i>Euphorbia hypericifolia</i> L.	Herb	Exotic	Perennial
14.	<i>Euphorbia granulata</i> L.	Herb	Native	Annual
15.	<i>Euphorbia lactea</i> Haw.	Shrub	Native	Perennial
16.	<i>Euphorbia royleana</i> Boiss. L.N.	Shrub	Native	Perennial
17.	<i>Euphorbia hirta</i> L.	Herb	Exotic	Annual
18.	<i>Euphorbia nivulia</i> L.	Shrub	Native	Perennial
19.	<i>Euphorbia pulcherrima</i> Willd. ex Klotzsch	Shrub	Exotic	Perennial
20.	<i>Euphorbia santapau</i> Henry	Shrub	Native	Perennial
21.	<i>Euphorbia milii</i> Des Moul.	Shrub	Exotic	Perennial
22.	<i>Euphorbia susanholmesiae</i> Binojk & Gopalan	Shrub	Native	Perennial
23.	<i>Euphorbia thymifolia</i> L.	Herb	Exotic	Annual
24.	<i>Euphorbia nerifolia</i> L.	Shrub	Native	Perennial
25.	<i>Euphorbia tirucalli</i> L.	Shrub	Native	Perennial
26.	<i>Euphorbia tortilis</i> Rottler ex Ainslie	Shrub	Native	Perennial
27.	<i>Euphorbia trigona</i> Mill.	Shrub	Native	Perennial
28.	<i>Euphorbia vajravelui</i> Binjok & Balakr.	Shrub	Native	Perennial
29.	<i>Excoecaria bicolor</i> L.	Shrub	Exotic	Perennial
30.	<i>Jatropha curcus</i> L.	Shrub	Exotic	Perennial
31.	<i>Jatropha podagrica</i> Hook.	Shrub	Exotic	Perennial
32.	<i>Jatropha gossypifolia</i> L.	Shrub	Exotic	Perennial
33.	<i>Jatropha integerrima</i> Jacq.	Shrub	Exotic	Perennial
34.	<i>Jatropha multifida</i> L.	Shrub	Exotic	Perennial
35.	<i>Kirganelia reticulata</i> Baill.	Shrub	Native	Perennial
36.	<i>Mallotus philippensis</i> Muell.	Tree	Exotic	Perennial
37.	<i>Pedilanthus tithymaloides</i> L.	Shrub	Exotic	Perennial
38.	<i>Ricinus communis</i> L.	Shrub	Exotic	Annual
	Fabaceae			
1.	<i>Acacia auriculiformis</i> A. Cunn. ex Benth.	Tree	Exotic	Perennial
2.	<i>Acacia catechu</i> Willd.	Tree	Native	Perennial
3.	<i>Acacia concinna</i> (Willd.) DC.	Tree	Native	Perennial
4.	<i>Acacia leucophloea</i> Willd.	Tree	Native	Perennial
5.	<i>Acacia mangium</i> Willd.	Tree	Exotic	Perennial
6.	<i>Acacia nilotica</i> (L.) Delile	Tree	Exotic	Perennial
7.	<i>Aeschynomene indica</i> L.	Herb	Native	Annual
8.	<i>Albizia lebeck</i> (L.) Willd.	Tree	Native	Perennial
9.	<i>Albizia saman</i> F. Muell.	Tree	Exotic	Perennial
10.	<i>Albizia procera</i> Benth.	Tree	Native	Perennial
11.	<i>Alhagi maurorum</i> Medik	Shrub	Exotic	Perennial

12.	<i>Alysicarpus longifolius</i> Wt. & Arn.	Herb	Native	Annual
13.	<i>Alysicarpus monilifer</i> DC.	Herb	Native	Annual
14.	<i>Alysicarpus vaginalis</i> (L.) DC.	Herb	Native	Annual
15.	<i>Arachis hypogaea</i> L.	Herb	Exotic	Annual
16.	<i>Atylosia scarabaeoides</i> Benth.	Herb	Native	Annual
17.	<i>Bauhinia acuminata</i> L.	Tree	Native	Perennial
18.	<i>Bauhinia purpurea</i> L.	Tree	Native	Perennial
19.	<i>Bauhinia racemosa</i> Lam.	Tree	Native	Perennial
20.	<i>Bauhinia variegata</i> L.	Tree	Native	Perennial
21.	<i>Butea monosperma</i> (Lam.) Taub.	Tree	Native	Perennial
22.	<i>Cajanus cajan</i> (L.) Mill.	Shrub	Exotic	Perennial
23.	<i>Caesalpinia crista</i> Lam.	Woody climber	Native	Perennial
24.	<i>Caesalpinia pulcherrima</i> (L.) Sw.	Shrub	Exotic	Perennial
25.	<i>Caesalpinia sappan</i> L.	Tree	Native	Perennial
26.	<i>Calliandra haematocephala</i> Hassk.	Shrub	Exotic	Perennial
27.	<i>Calliandra surinamensis</i> Benth.	Shrub	Exotic	Perennial
28.	<i>Canavalia gladiata</i> (Jacq.) DC.	Herb	Exotic	Annual
29.	<i>Cassia fistula</i> L.	Tree	Native	Perennial
30.	<i>Cassia marginata</i> Roxb.	Tree	Native	Perennial
31.	<i>Cassia pumila</i> Lam.	Herb	Native	Annual
32.	<i>Cassia javanica</i> L.	Tree	Exotic	Perennial
33.	<i>Cicer arietinum</i> L.	Herb	Exotic	Annual
34.	<i>Clitoria ternatea</i> L.	Herb	Native	Perennial
35.	<i>Crotalaria medicaginea</i> L.	Herb	Exotic	Annual
36.	<i>Cyamopsis tetragonoloba</i> (L.) Taub.	Herb	Native	Annual
37.	<i>Dalbergia sissoo</i> Roxb.	Tree	Native	Perennial
38.	<i>Delonix regia</i> (Boj) Raf.	Tree	Exotic	Perennial
39.	<i>Derris scandens</i> Benth.	Woody climber	Native	Perennial
40.	<i>Desmodium gangeticum</i> (L.) DC.	Undershrub	Native	Annual
41.	<i>Desmodium triflorum</i> DC.	Herb	Native	Annual
42.	<i>Dichrostachys cinerea</i> (L.) Wt. & Arn.	Tree	Native	Perennial
43.	<i>Dolichos lablab</i> L.	Herb	Exotic	Perennial
44.	<i>Erythrina variegata</i> L.	Tree	Native	Perennial
45.	<i>Haematoxylum compechianum</i> L.	Tree	Exotic	Perennial
46.	<i>Heylandia latebrosa</i> (L.) DC.	Herb	Native	Annual
47.	<i>Indigofera enneaphylla</i> L.	Herb	Native	Annual
48.	<i>Indigofera linifolia</i> Retz.	Herb	Native	Annual
49.	<i>Lathyrus aphaca</i> L.	Herb	Native	Annual
50.	<i>Lathyrus sphaericus</i> Retz.	Herb	Exotic	Annual
51.	<i>Lens culinaris</i> Medik.	Herb	Exotic	Annual
52.	<i>Leucaena leucocephala</i> Willd.	Tree	Exotic	Perennial
53.	<i>Melilotus alba</i> Desv.	Herb	Exotic	Annual
54.	<i>Melilotus indicus</i> (L.) All.	Herb	Native	Annual
55.	<i>Medicago lupulina</i> L.	Herb	Native	Annual
56.	<i>Medicago polymorpha</i> L.	Herb	Exotic	Annual
57.	<i>Medicago sativa</i> L.	Herb	Exotic	Annual
58.	<i>Millettia pinnata</i> (L.) Panigrahi	Tree	Native	Perennial
59.	<i>Mimosa pigra</i> L.	Shrub	Exotic	Perennial
60.	<i>Mimosa pudica</i> L.	Herb	Exotic	Annual
61.	<i>Mucuna pruriens</i> Baker	Herb	Exotic	Perennial
62.	<i>Parkinsonia aculeata</i> L.	Tree	Exotic	Perennial
63.	<i>Peltophorum pterocarpum</i> (DC.) K. Heyne	Tree	Exotic	Perennial
64.	<i>Phaseolus aureus</i> Roxb.	Herb	Native	Annual
65.	<i>Phaseolus mungo</i> Roxb.	Herb	Native	Annual
66.	<i>Phascolus lunatus</i> L.	Herb	Exotic	Annual
67.	<i>Pisum sativum</i> L.	Herb	Exotic	Annual
68.	<i>Pithecellobium dulce</i> (Roxb.) Benth.	Tree	Exotic	Perennial
69.	<i>Prosopis cineraria</i> Druce	Tree	Native	Perennial
70.	<i>Prosopis juliflora</i> (Sweet) DC.	Shrub	Exotic	Perennial
71.	<i>Prosopis specigera</i> L.	Tree	Native	Perennial
72.	<i>Rhynchosia capitata</i> DC.	Herb	Native	Perennial
73.	<i>Rhynchosia minima</i> (L.) DC.	Herb	Native	Perennial
74.	<i>Saraca indica</i> Roxb.	Tree	Native	Perennial
75.	<i>Senegalia polycantha</i> (Willd.) Seigler & Ebinger	Tree	Native	Perennial
76.	<i>Senna alata</i> (L.) Roxb.	Shrub	Exotic	Perennial
77.	<i>Senna alexandrina</i> Mill.	Herb	Native	Annual
78.	<i>Senna auriculata</i> (L.) Roxb.	Shrub	Native	Perennial
79.	<i>Senna obtusifolia</i> (L.) H. S. Irwin & Barneby	Herb	Exotic	Annual

80.	<i>Senna occidentalis</i> (L.) Link.	Shrub	Exotic	Perennial
81.	<i>Senna siamea</i> (Lam.) Irwin et Barneby	Tree	Exotic	Perennial
82.	<i>Senna spectabilis</i> (DC.) Irwin & Barneby	Tree	Exotic	Perennial
83.	<i>Senna surattensis</i> (Burm. F.) Irwin & Barneby	Tree	Exotic	Perennial
84.	<i>Senna tora</i> (L.) Roxb.	Herb	Exotic	Annual
85.	<i>Sesbania aculeata</i> (Willd.) Poir.	Shrub	Exotic	Perennial
86.	<i>Sesbania grandiflora</i> (L.) Poir.	Tree	Exotic	Perennial
87.	<i>Sesbania sesban</i> (L.) Merr.	Shrub	Exotic	Perennial
88.	<i>Tamarindus indicus</i> L.	Tree	Exotic	Perennial
89.	<i>Tephrosia pumila</i> Pers.	Herb	Native	Perennial
90.	<i>Tephrosia purpurea</i> L.	Herb	Native	Perennial
91.	<i>Tephrosia villosa</i> Pers.	Herb	Exotic	Annual
92.	<i>Trifolium alexandrinum</i> L.	Herb	Exotic	Annual
93.	<i>Trigonella corniculata</i> L.	Herb	Native	Annual
94.	<i>Trigonella foenum-graecum</i> L.	Herb	Exotic	Annual
95.	<i>Uraria picta</i> Desv.	Undershrub	Native	Perennial
96.	<i>Uraria lagopodioides</i> DC.	Shrub	Native	Perennial
97.	<i>Vachellia farnesiana</i> (L.) Wt. & Arn.	Tree	Exotic	Perennial
98.	<i>Vicia faba</i> L.	Herb	Exotic	Annual
99.	<i>Vicia hirsutum</i> (L.) Gray	Herb	Exotic	Annual
100.	<i>Vicia sativa</i> L.	Herb	Exotic	Annual
101.	<i>Vigna aconitifolia</i> (Jacq.) Mauchal	Herb	Native	Annual
102.	<i>Vigna radiata</i> (L.) Wilczek	Herb	Exotic	Annual
103.	<i>Vigna sinensis</i> (L.) Savi & Hassk.	Herb	Exotic	Annual
104.	<i>Zornia diphylla</i> Pers.	Herb	Native	Annual
Fumariaceae				
1.	<i>Fumaria parviflora</i> Lam.	Herb	Native	Annual
Gentianaceae				
1.	<i>Centaurium pulchellum</i> (Swartz) Druce	Herb	Exotic	Annual
2.	<i>Enicostema littorale</i> Blume	Herb	Native	Annual
3.	<i>Exacum pendunculatum</i> L.	Herb	Native	Annual
4.	<i>Exacum tetragonum</i> Roxb.	Herb	Native	Annual
Lamiaceae				
1.	<i>Anisomeles indica</i> (L.) Kuntze	Herb	Native	Annual
2.	<i>Caryopteris incana</i> Miq.	Shrub	Exotic	Perennial
3.	<i>Caryopteris wallichiana</i> Schauer	Shrub	Exotic	Perennial
4.	<i>Clerodendrum fragrans</i> Vent	Shrub	Exotic	Perennial
5.	<i>Clerodendrum infortunatum</i> Gaertn.	Shrub	Native	Perennial
6.	<i>Clerodendrum phlomides</i> L. f.	Herb	Native	Perennial
7.	<i>Clerodendrum serratum</i> (L.) Moon	Shrub	Native	Perennial
8.	<i>Coleus</i> hybrid	Herb	Exotic	Perennial
9.	<i>Hyptis suaveolens</i> (L.) Poir.	Herb	Native	Annual
10.	<i>Lavendula angustifolia</i> Mill.	Herb	Exotic	Perennial
11.	<i>Leonurus sibiricus</i> L.	Herb	Exotic	Annual
12.	<i>Leucas aspera</i> (Willd.) Link	Herb	Native	Annual
13.	<i>Lycopus europaeus</i> L.	Undershrub	Native	Perennial
14.	<i>Mentha arvensis</i> L.	Herb	Exotic	Perennial
15.	<i>Mentha spicata</i> L.	Herb	Exotic	Perennial
16.	<i>Nepeta ruderalis</i> Buch.-Ham. ex Benth.	Herb	Exotic	Annual
17.	<i>Ocimum basilicum</i> L.	Herb	Native	Perennial
18.	<i>Ocimum canum</i> Sims.	Herb	Exotic	Annual
19.	<i>Ocimum sanctum</i> L.	Shrub	Native	Perennial
20.	<i>Orthosiphon pallidus</i> Royle ex Benth.	Undershrub	Native	Annual
21.	<i>Plectranthus amboinicus</i> (Lour.) Spreng.	Herb	Exotic	Perennial
22.	<i>Plectranthus scutellarioides</i> (L.) R. Br.	Herb	Native	Perennial
23.	<i>Salvia officinalis</i> L.	Herb	Exotic	Perennial
24.	<i>Salvia plebeia</i> R. Br.	Herb	Exotic	Biennial
25.	<i>Salvia splendens</i> Sellow ex J. A. Schultes	Herb	Exotic	Perennial
26.	<i>Tectona grandis</i> L. f.	Tree	Native	Perennial
27.	<i>Vitex negundo</i> L.	Tree	Native	Perennial
Lauraceae				
1.	<i>Cinnamomum verum</i> J. Presl	Tree	Exotic	Perennial
2.	<i>Cinnamomum camphora</i> (L.) J. Presl	Tree	Exotic	Perennial
3.	<i>Cinnamomum tamala</i> Buch.-Ham.	Tree	Native	Perennial
Lentibulariaceae				
1.	<i>Utricularia stellaris</i> L. f.	Herb	Exotic	Perennial
2.	<i>Utricularia aurea</i> Lour.	Herb	Native	Annual
Linaceae				

1.	<i>Linum usitatissimum</i> L.	Herb	Exotic	Annual
Linderniaceae				
1.	<i>Lindernia ciliata</i> (Colsm.) Pennell	Herb	Exotic	Annual
2.	<i>Lindernia crustacea</i> (L.) F. Muell	Herb	Native	Annual
3.	<i>Lindernia parviflora</i> Haines	Herb	Native	Annual
4.	<i>Torenia asiatica</i> L.	Herb	Exotic	Annual
5.	<i>Torenia fournieria</i> Linden ex E. Fourn	Herb	Exotic	Annual
Longaniaceae				
1.	<i>Strychnos nux-vomica</i> L.	Tree	Native	Perennial
Loranthaceae				
1.	<i>Loranthus longiflorus</i> Desv.	Herb	Native	Perennial
Lythraceae				
1.	<i>Ammania baccifera</i> L.	Herb	Native	Annual
2.	<i>Ammania senegalensis</i> Lamk.	Herb	Exotic	Perennial
3.	<i>Lagerstroemia indica</i> Blanco	Shrub	Native	Perennial
4.	<i>Lagerstroemia speciosa</i> (L.) Pers.	Tree	Native	Perennial
5.	<i>Lawsonia inermis</i> L.	Shrub	Exotic	Perennial
6.	<i>Punica granatum</i> L.	Tree	Exotic	Perennial
7.	<i>Trapa natans</i> L.	Herb	Exotic	Annual
8.	<i>Woodfordia fruticosa</i> (L.) Kurz.	Shrub	Native	Perennial
Magnoliaceae				
1.	<i>Magnolia grandiflora</i> L.	Shrub	Native	Perennial
2.	<i>Michelia champaca</i> L.	Shrub	Native	Perennial
3.	<i>Schisandra grandiflora</i> Hook.	Woody climber	Native	Perennial
Malvaceae				
1.	<i>Abelmoschus esculentus</i> (L.) Moench.	Herb	Exotic	Biennial
2.	<i>Abutilon bidentatum</i> A. Rich	Shrub	Native	Perennial
3.	<i>Abutilon indicum</i> (L.) Sweet	Shrub	Native	Perennial
4.	<i>Althea rosea</i> (L.) Cav.	Undershrub	Exotic	Biennial
5.	<i>Bombax ceiba</i> L.	Tree	Native	Perennial
6.	<i>Ceiba pentandra</i> (L.) Gaertn.	Tree	Exotic	Perennial
7.	<i>Ceiba speciosa</i> (A. St.-Hill) Raveena	Tree	Exotic	Perennial
8.	<i>Corchorus aestuans</i> L.	Herb	Exotic	Annual
9.	<i>Corchorus fascicularis</i> Lam.	Herb	Native	Annual
10.	<i>Corchorus olitorius</i> L.	Herb	Exotic	Annual
11.	<i>Corchorus trilocularis</i> L.	Herb	Native	Annual
12.	<i>Dombeya cayeuxii</i> Cav.	Shrub	Exotic	Perennial
13.	<i>Dombeya mastersii</i> Hook. F.	Shrub	Exotic	Perennial
14.	<i>Gossypium herbaceum</i> L.	Shrub	Exotic	Perennial
15.	<i>Gossypium hirsutum</i> L.	Shrub	Exotic	Perennial
16.	<i>Grewia asiatica</i> L.	Shrub	Native	Perennial
17.	<i>Grewia serrulata</i> DC.	Tree	Native	Perennial
18.	<i>Grewia tiliaefolia</i> Vahl	Tree	Native	Perennial
19.	<i>Guazuma ulmifolia</i> Lam.	Tree	Exotic	Perennial
20.	<i>Helicteres isora</i> L.	Tree	Native	Perennial
21.	<i>Hibiscus cannabinus</i> L.	Shrub	Exotic	Biennial
22.	<i>Hibiscus lobatus</i> (Murray) Kuntze	Herb	Native	Annual
23.	<i>Hibiscus rosa-sinensis</i> L.	Shrub	Exotic	Perennial
24.	<i>Hibiscus schizopetalus</i> Hook f.	Shrub	Exotic	Perennial
25.	<i>Hibiscus sabdariffa</i> L.	Shrub	Exotic	Perennial
26.	<i>Hibiscus mutabilis</i> L.	Shrub	Exotic	Perennial
27.	<i>Hibiscus syriacus</i> L.	Shrub	Exotic	Perennial
28.	<i>Malva parviflora</i> L.	Herb	Native	Annual
29.	<i>Malva sylvestris</i> L.	Undershrub	Exotic	Annual
30.	<i>Malva viscosa</i> Cav.	Undershrub	Exotic	Perennial
31.	<i>Malvastrum coromandelianum</i> (L.) Garcke	Herb	Exotic	Perennial
32.	<i>Pavonia odorata</i> Willd.	Herb	Exotic	Perennial
33.	<i>Pentapetes phoenicea</i> L.	Herb	Exotic	Annual
34.	<i>Pterospermum acerifolium</i> (L.) Willd.	Tree	Native	Perennial
35.	<i>Sida acuta</i> Burm. F.	Undershrub	Exotic	Perennial
36.	<i>Sida cordifolia</i> L.	Undershrub	Native	Perennial
37.	<i>Sida rhombifolia</i> L.	Undershrub	Exotic	Perennial
38.	<i>Sterculia foetida</i> L.	Tree	Exotic	Perennial
39.	<i>Sterculia alata</i> Roxb.	Tree	Native	Perennial
40.	<i>Sterculia villosa</i> Roxb.	Tree	Native	Perennial
41.	<i>Tespesia populnea</i> Solnd.	Tree	Exotic	Perennial
42.	<i>Triumfetta rhomboidea</i> Jacq.	Shrub	Exotic	Perennial

43.	<i>Urena lobata</i> L.	Undershrub	Exotic	Annual
	Martyniaceae			
1.	<i>Martynia annua</i> L.	Herb	Exotic	Perennial
	Meliaceae			
1.	<i>Azadirachta indica</i> A. Juss.	Tree	Native	Perennial
2.	<i>Melia azedarach</i> L.	Tree	Native	Perennial
3.	<i>Swietenia mahagoni</i> (L.)	Tree	Exotic	Perennial
4.	<i>Toona ciliata</i> M. Roem.	Tree	Native	Perennial
	Menispermaceae			
1.	<i>Cissampelos pareira</i> L.	Woody climber	Native	Perennial
2.	<i>Cocculus hirsutus</i> (L.) Diels	Shrub	Native	Perennial
3.	<i>Tinospora cordifolia</i> (Willd.) Miers	Woody climber	Native	Perennial
	Menyanthaceae			
1.	<i>Nymphoides hydrophylla</i> (Lour.) Kuntze	Herb	Native	Annual
	Molluginaceae			
1.	<i>Glinus lotoides</i> L.	Herb	Exotic	Annual
2.	<i>Glinus oppositifolius</i> (L.) Aug. DC.	Herb	Exotic	Annual
3.	<i>Mollugo cerviana</i> (L.) Ser.	Herb	Exotic	Annual
4.	<i>Mollugo hirta</i> Thunb.	Herb	Native	Annual
	Moraceae			
1.	<i>Artocarpus heterophyllus</i> Lam.	Tree	Native	Perennial
2.	<i>Artocarpus lacucha</i> Roxb.	Tree	Native	Perennial
3.	<i>Ficus benghalensis</i> L.	Tree	Native	Perennial
4.	<i>Ficus benjamina</i> L.	Tree	Exotic	Perennial
5.	<i>Ficus carica</i> L.	Tree	Exotic	Perennial
6.	<i>Ficus elastica</i> Roxb.	Tree	Native	Perennial
7.	<i>Ficus glomerata</i> Roxb.	Tree	Exotic	Perennial
8.	<i>Ficus hispida</i> L. f.	Tree	Native	Perennial
9.	<i>Ficus virens</i> var. <i>sublanceolata</i> Miq. Corner	Tree	Native	Perennial
10.	<i>Ficus palmata</i> Forssk.	Tree	Native	Perennial
11.	<i>Ficus religiosa</i> L.	Tree	Native	Perennial
12.	<i>Ficus retusa</i> L.	Tree	Exotic	Perennial
13.	<i>Ficus rumphii</i> Blume	Tree	Native	Perennial
14.	<i>Morus alba</i> L.	Tree	Exotic	Perennial
15.	<i>Morus nigra</i> L.	Tree	Exotic	Perennial
16.	<i>Streblus asper</i> Lour.	Tree	Native	Perennial
	Moringaceae			
1.	<i>Moringa oleifera</i> Lam.	Tree	Exotic	Perennial
	Myrtaceae			
1.	<i>Callistemon lanceolatus</i> Sweet	Tree	Exotic	Perennial
2.	<i>Eucalyptus globulus</i> Labill.	Tree	Exotic	Perennial
3.	<i>Eucalyptus</i> hybrid	Tree	Exotic	Perennial
4.	<i>Eucalyptus rudis</i> Endl.	Tree	Exotic	Perennial
5.	<i>Eucalyptus rostrata</i> Schlecht	Tree	Exotic	Perennial
6.	<i>Eucalyptus tereticornis</i> Sm.	Tree	Exotic	Perennial
7.	<i>Melaleuca leucodendra</i> L.	Tree	Exotic	Perennial
8.	<i>Myrtus communis</i> L.	Shrub	Exotic	Perennial
9.	<i>Psidium guajava</i> L.	Tree	Exotic	Perennial
10.	<i>Syzygium cumini</i> (L.) Skeels	Tree	Native	Perennial
	Nelumbonaceae			
1.	<i>Nelumbo nucifera</i> Gaertn.	Herb	Native	Perennial
	Nyctaginaceae			
1.	<i>Boerhavia diffusa</i> L.	Herb	Native	Annual
2.	<i>Boerhavia repanda</i> Willd.	Herb	Native	Perennial
3.	<i>Bougainvillea buttiana</i> Holtlum & Standl.	Shrub	Exotic	Perennial
4.	<i>Bougainvillea glabra</i> Choisy	Shrub	Exotic	Perennial
5.	<i>Bougainvillea peruviana</i> Humb.& Bonpl.	Shrub	Exotic	Perennial
6.	<i>Bougainvillea spectabilis</i> Willd.	Shrub	Exotic	Perennial
7.	<i>Mirabilis jalapa</i> L.	Herb	Exotic	Annual
	Nymphaeaceae			
1.	<i>Nymphaea alba</i> L.	Herb	Exotic	Perennial
2.	<i>Nymphaea nouchali</i> Burm. F.	Herb	Native	Perennial
	Ochnaceae			
1.	<i>Ochna pumila</i> Buch.-Ham. ex DC.	Herb	Native	Annual
	Oleaceae			
1.	<i>Jasminum auriculatum</i> Vahl	Shrub	Native	Perennial
2.	<i>Jasminum flexile</i> Vahl	Shrub	Native	Perennial
3.	<i>Jasminum officinale</i> L.	Shrub	Native	Perennial
4.	<i>Jasminum sambac</i> (L.) Ait.	Shrub	Exotic	Perennial
5.	<i>Nyctanthes arbor-tristis</i> L.	Tree	Native	Perennial

	Onagraceae			
1.	<i>Ludwigia adscendens</i> (L.) Hara	Herb	Native	Annual
2.	<i>Ludwigia octovalvis</i> (Jacq.)	Herb	Exotic	Perennial
	Orobanchaceae			
1.	<i>Orobanche aegyptiaca</i> Pers.	Herb	Exotic	Annual
2.	<i>Striga asiatica</i> Benth.	Herb	Native	Annual
	Oxalidaceae			
1.	<i>Averrhoa carambola</i> L.	Tree	Native	Perennial
2.	<i>Biophytum sensitivum</i> DC.	Herb	Native	Annual
3.	<i>Oxalis corniculata</i> L.	Herb	Exotic	Perennial
4.	<i>Oxalis debilis</i> Kunth.	Herb	Exotic	Perennial
5.	<i>Oxalis latifolia</i> Kunth.	Herb	Exotic	Perennial
	Papavaraceae			
1.	<i>Argemone mexicana</i> L.	Herb	Exotic	Annual
2.	<i>Eschscholzia californica</i> Cham.	Herb	Exotic	Annual
3.	<i>Papaver orientale</i> L.	Herb	Exotic	Annual
4.	<i>Papaver nudicaule</i> L.	Herb	Exotic	Annual
5.	<i>Papaver rhoeas</i> L.	Herb	Exotic	Annual
	Passifloraceae			
1.	<i>Passiflora edulis</i> Sims	Herb	Exotic	Perennial
2.	<i>Passiflora foetida</i> (L.) M. Roem.	Herb	Exotic	Perennial
	Pedaliaceae			
1.	<i>Pedaliium murex</i> L.	Herb	Native	Annual
2.	<i>Sesamum indicum</i> L.	Herb	Exotic	Annual
	Phyllanthaceae			
1.	<i>Phyllanthus emblica</i> L.	Tree	Native	Perennial
2.	<i>Phyllanthus maderapatensis</i> L.	Herb	Native	Annual
3.	<i>Phyllanthus niruri</i> L.	Herb	Native	Annual
4.	<i>Phyllanthus simplex</i> Retz.	Herb	Native	Annual
	Piperaceae			
1.	<i>Peperomia pellucida</i> (L.) Kunth	Herb	Exotic	Annual
2.	<i>Piper longum</i> L.	Undershrub	Native	Perennial
3.	<i>Piper nigrum</i> L.	Undershrub	Native	Perennial
	Plantaginaceae			
1.	<i>Antirrhinum majus</i> L.	Herb	Exotic	Annual
2.	<i>Bacopa monnieri</i> (L.) Pennell	Herb	Native	Annual
3.	<i>Digitalis purpurea</i> L.	Herb	Exotic	Annual
4.	<i>Dopatrium junceum</i> (Roxb.) Buch.- Ham.	Herb	Native	Perennial
5.	<i>Kickxia ramosissima</i> (Wall.) Janch.	Herb	Native	Perennial
6.	<i>Limnophila sessiliflora</i> (Vahl) Blume	Herb	Native	Annual
7.	<i>Linaria ramosissima</i> (Wall.) Janch.	Herb	Native	Perennial
8.	<i>Lindenbergia indica</i> Kuntze	Herb	Native	Perennial
9.	<i>Mazus japonicus</i> Kuntze	Herb	Exotic	Perennial
10.	<i>Mecardonia procumbens</i> (Mill) Small	Herb	Exotic	Annual
11.	<i>Misopates orontium</i> (L.) Raf.	Herb	Exotic	Annual
12.	<i>Plantago ovata</i> Forssk.	Herb	Exotic	Annual
13.	<i>Russelia coccinea</i> (L.) Wettst.	Shrub	Exotic	Perennial
14.	<i>Scoparia dulcis</i> L.	Herb	Native	Annual
15.	<i>Verbascum chinense</i> (L.) Santapau	Herb	Native	Annual
16.	<i>Verbascum thapsus</i> L.	Herb	Exotic	Annual
17.	<i>Veronica agrestis</i> L.	Herb	Exotic	Annual
18.	<i>Veronica anagallis-aquatica</i> L.	Herb	Exotic	Annual
	Plumbaginaceae			
1.	<i>Plumbago rosea</i> L.	Shrub	Native	Perennial
	Polemoniaceae			
1.	<i>Phlox drommondii</i> Hook.	Herb	Exotic	Annual
2.	<i>Phlox paniculata</i> L.	Herb	Exotic	Perennial
	Polygalaceae			
1.	<i>Polygala chinensis</i> L.	Herb	Native	Annual
	Polygonaceae			
1.	<i>Antigonon leptopus</i> Hook. & Arn.	Herb	Exotic	Perennial
2.	<i>Homocladium platycladum</i> (F. Muell) L. H. Bailey	Shrub	Exotic	Perennial
3.	<i>Persicaria amphibia</i> (L.) Gray	Herb	Native	Perennial
4.	<i>Persicaria capitata</i> (Buch.-Ham. ex D. Don) H Gross	Herb	Native	Annual
5.	<i>Persicaria glabra</i> (Willd.) M Gomez	Herb	Native	Annual
6.	<i>Persicaria hydropiper</i> (L.) Delabre	Herb	Exotic	Annual
7.	<i>Persicaria longiseta</i> Bruijn (Kitagawa)	Herb	Native	Annual
8.	<i>Persicaria orientalis</i> L.	Herb	Native	Annual

9.	<i>Persicaria pubescens</i> (Blume) H. Hara	Herb	Native	Annual
10.	<i>Persicaria serrulata</i> (Lagasc.) Webb. & Moq.	Herb	Exotic	Annual
11.	<i>Rumex dentatus</i> L.	Herb	Exotic	Annual
Portulacaceae				
1.	<i>Portulaca oleracea</i> L.	Herb	Exotic	Biennial
2.	<i>Portulaca quadrifida</i> L.	Herb	Exotic	Biennial
3.	<i>Portulaca grandiflora</i> Hook.	Herb	Exotic	Annual
4.	<i>Portulaca pilosa</i> L.	Herb	Exotic	Annual
5.	<i>Portulacaria afra</i> Jacq.	Shrub	Exotic	Perennial
Primulaceae				
1.	<i>Anagallis arvensis</i> L.	Herb	Exotic	Annual
Proteaceae				
1.	<i>Grevillea pteridifolia</i> Knight	Tree	Exotic	Perennial
2.	<i>Grevillea robusta</i> A. Cunn.ex R. Br.	Tree	Exotic	Perennial
Putranjivaceae				
1.	<i>Putranjiva roxburghii</i> Wall.	Shrub	Native	Perennial
Ranunculaceae				
1.	<i>Consolida ajacis</i> (L.) Schur	Herb	Exotic	Annual
2.	<i>Ranunculus aquatilis</i> L.	Herb	Exotic	Annual
3.	<i>Ranunculus sceleratus</i> L.	Herb	Exotic	Annual
Rhamnaceae				
1.	<i>Ziziphus mauritiana</i> Lam.	Tree	Exotic	Perennial
2.	<i>Ziziphus nummularia</i> (Burm. F.) Wt. & Arn.	Shrub	Native	Perennial
3.	<i>Ziziphus oenoplia</i> Mill.	Shrub	Native	Perennial
4.	<i>Ziziphus xylopyrus</i> Willd.	Shrub	Native	Perennial
Rosaceae				
1.	<i>Eriobotrya japonica</i> Lindl	Tree	Exotic	Perennial
2.	<i>Potentilla glandulosa</i> Lindl.	Herb	Exotic	Perennial
3.	<i>Potentilla supina</i> L.	Herb	Native	Annual
4.	<i>Prunus amygdalus</i> Batsch.	Tree	Exotic	Perennial
5.	<i>Prunus domestica</i> L.	Tree	Exotic	Perennial
6.	<i>Prunus persica</i> (L.) Stokes	Tree	Exotic	Perennial
7.	<i>Pyrus pyrifolia</i> (Burm.) Nak.	Tree	Exotic	Perennial
8.	<i>Rosa banksiae</i> R. Br.	Shrub	Exotic	Perennial
9.	<i>Rosa centifolia</i> L.	Shrub	Exotic	Perennial
10.	<i>Rosa damascena</i> Mill.	Shrub	Exotic	Perennial
11.	<i>Rosa indica</i> L.	Shrub	Native	Perennial
12.	<i>Rosa chinensis</i> Jacq.	Shrub	Exotic	Perennial
13.	<i>Rosa gigantea</i> Mill.	Shrub	Native	Perennial
14.	<i>Rosa moschata</i> Herrm.	Shrub	Native	Perennial
15.	<i>Rosa multiflora</i> Thunb.	Shrub	Exotic	Perennial
16.	<i>Spiraea cantoniensis</i> L.	Shrub	Exotic	Perennial
Rubiaceae				
1.	<i>Anthocephalus cadamba</i> Miq.	Tree	Native	Perennial
2.	<i>Borreria articularis</i> L.	Herb	Native	Annual
3.	<i>Borreria pusila</i> (Wall.) DC.	Herb	Native	Annual
4.	<i>Gardenia gummifera</i> L. f.	Shrub	Native	Perennial
5.	<i>Gardenia jasminoides</i> Ellis	Shrub	Native	Perennial
6.	<i>Haldina cordifolia</i> Roxb.	Tree	Native	Perennial
7.	<i>Hamelia patens</i> Jacq.	Shrub	Exotic	Perennial
8.	<i>Ixora chinensis</i> L.	Shrub	Exotic	Perennial
9.	<i>Ixora coccinea</i> L.	Shrub	Native	Perennial
10.	<i>Ixora parviflora</i> Vahl	Shrub	Native	Perennial
11.	<i>Ixora undulata</i> Roxb.	Shrub	Exotic	Perennial
12.	<i>Mitragyna parvifolia</i> (Roxb.) Korth	Tree	Native	Perennial
13.	<i>Mussaenda frondosa</i> L.	Shrub	Native	Perennial
14.	<i>Mussaenda hybrid</i>	Shrub	Exotic	Perennial
15.	<i>Mussaenda incana</i> Wall. ex Roxb.	Shrub	Exotic	Perennial
16.	<i>Mussaenda luteola</i> Delile	Shrub	Exotic	Perennial
17.	<i>Oldenlandia corymbosa</i> L.	Herb	Native	Annual
18.	<i>Oldenlandia dichotoma</i> Hook.	Herb	Native	Annual
19.	<i>Oldenlandia diffusa</i> (Willd.) Roxb.	Herb	Native	Annual
20.	<i>Pentas lanceolata</i> (Forssk.) Deflers	Undershrub	Exotic	Perennial
21.	<i>Spermacoce stricta</i> L.	Herb	Native	Annual
Rutaceae				
1.	<i>Aegle marmelos</i> (L.) Corr.	Tree	Native	Perennial
2.	<i>Citrus aurantifolia</i> Swingle	Tree	Exotic	Perennial
3.	<i>Citrus aurantium</i> L.	Tree	Native	Perennial
4.	<i>Citrus limon</i> (L.) Burm. F.	Tree	Exotic	Perennial
5.	<i>Citrus limettioides</i> Tanaka	Tree	Exotic	Perennial

6.	<i>Citrus maxima</i> (Burm.) Merr.	Tree	Exotic	Perennial
7.	<i>Citrus medica</i> L.	Tree	Native	Perennial
8.	<i>Citrus paradisi</i> Macf.	Tree	Exotic	Perennial
9.	<i>Citrus reticulata</i> Blanco	Tree	Exotic	Perennial
10.	<i>Citrus sinensis</i> (L.) Osbeck	Tree	Exotic	Perennial
11.	<i>Feronia acidissima</i> L.	Tree	Native	Perennial
12.	<i>Murraya koenigii</i> (L.) Spreng	Tree	Native	Perennial
13.	<i>Murraya paniculata</i> (L.) Jacq.	Shrub	Native	Perennial
14.	<i>Ruta graveolens</i> L.	Undershrub	Exotic	Perennial
Salicaceae				
1.	<i>Flacourtia indica</i> (Burm. F.) Merr.	Shrub	Native	Perennial
2.	<i>Populus deltoides</i> L.	Tree	Exotic	Perennial
Santalaceae				
1.	<i>Santalum album</i> L.	Tree	Native	Perennial
Sapindaceae				
1.	<i>Dodonaea viscosa</i> Jacq.	Shrub	Exotic	Perennial
2.	<i>Litchi chinensis</i> (Gaertn.) Sonn.	Tree	Exotic	Perennial
3.	<i>Sapindus mukorossi</i> Gaertn.	Tree	Native	Perennial
4.	<i>Schleichera oleosa</i> (Lour.) Oken.	Tree	Native	Perennial
Sapotaceae				
1.	<i>Madhuca longifolia</i> (J. Konig) J. F. Macbr.	Tree	Native	Perennial
2.	<i>Manilkara hexandra</i> (Roxb.) Dubard	Tree	Native	Perennial
3.	<i>Manilkara zapota</i> Roxb.	Tree	Exotic	Perennial
4.	<i>Mimusops elengi</i> L.	Tree	Exotic	Perennial
Simaroubaceae				
1.	<i>Ailanthus excelsa</i> Roxb.	Tree	Native	Perennial
Solanaceae				
1.	<i>Capsicum annuum</i> L.	Undershrub	Exotic	Perennial
2.	<i>Capsicum frutescens</i> L.	Undershrub	Exotic	Perennial
3.	<i>Cestrum diurnum</i> L.	Shrub	Exotic	Perennial
4.	<i>Cestrum nocturnum</i> L.	Shrub	Exotic	Perennial
5.	<i>Datura metel</i> L.	Undershrub	Exotic	Perennial
6.	<i>Datura stramonium</i> L.	Herb	Exotic	Annual
7.	<i>Lycopersicon esculentum</i> Mill.	Herb	Exotic	Annual
8.	<i>Nicotiana plumbaginifolia</i> Viv.	Herb	Exotic	Annual
9.	<i>Nicotiana tabacum</i> L.	Herb	Exotic	Annual
10.	<i>Petunia hybrida</i> Vilm.	Herb	Exotic	Annual
11.	<i>Petunia violacea</i> Lindl.	Herb	Exotic	Annual
12.	<i>Physalis minima</i> L.	Herb	Exotic	Annual
13.	<i>Solanum elaeagnifolium</i> Cav.	Herb	Exotic	Perennial
14.	<i>Solanum melongena</i> L.	Shrub	Native	Perennial
15.	<i>Solanum nigrum</i> L.	Herb	Native	Annual
16.	<i>Solanum torvum</i> Sweet	Shrub	Exotic	Perennial
17.	<i>Solanum tuberosum</i> L.	Herb	Exotic	Annual
18.	<i>Solanum virginianum</i> L.	Herb	Native	Annual
19.	<i>Withania somnifera</i> Dunal	Shrub	Exotic	Perennial
Sphenocleaceae				
1.	<i>Sphenoclea zeylanica</i> Gaertn.	Herb	Native	Annual
Symplocaceae				
1.	<i>Symplocos racemosa</i> Roxb.	Tree	Native	Perennial
Tamaricaceae				
1.	<i>Tamarix aphylla</i> (L.) Karst.	Tree	Exotic	Perennial
2.	<i>Tamarix dioica</i> Roxb.	Tree	Exotic	Perennial
3.	<i>Tamarix troupis</i> Hole	Shrub	Exotic	Perennial
Tropaeolaceae				
1.	<i>Tropaeolum majus</i> L.	Herb	Exotic	Annual
Ulmaceae				
1.	<i>Holoptelea integrifolia</i> (Roxb.) Planch.	Tree	Native	Perennial
Urticaceae				
1.	<i>Pouzolzea pentandra</i> (Roxb.) Benn.	Undershrub	Native	Perennial
2.	<i>Pouzolzea zeylanica</i> (L.) Benn.	Undershrub	Exotic	Perennial
3.	<i>Urtica dioica</i> Roxb.	Herb	Native	Perennial
Verbenaceae				
1.	<i>Callicarpa macrophylla</i> Vahl	Shrub	Native	Perennial
2.	<i>Duranta erecta</i> L.	Shrub	Native	Perennial
3.	<i>Lantana camara</i> L.	Shrub	Exotic	Perennial
4.	<i>Lantana indica</i> Roxb.	Shrub	Exotic	Perennial
5.	<i>Phyla nodiflora</i> (L.) Greene	Herb	Exotic	Annual

6.	<i>Petrea volubilis</i> L.	Woody climber	Exotic	Perennial
7.	<i>Verbena officinalis</i> L.	Herb	Exotic	Perennial
Violaceae				
1.	<i>Hybanthus enneaspermus</i> (L.) F. Muell.	Herb	Native	Perennial
2.	<i>Viola odorata</i> L.	Herb	Exotic	Annual
3.	<i>Viola tricolor</i> L.	Herb	Exotic	Annual
Vitaceae				
1.	<i>Cayratia trifolia</i> (L.) Domin	Herb	Native	Perennial
2.	<i>Vitis quandrangularis</i> L.	Herb	Native	Perennial
3.	<i>Vitis vinifera</i> L.	Woody climber	Exotic	Perennial
Zygophyllaceae				
1.	<i>Balanites roxburghii</i> Planch.	Tree	Native	Perennial
2.	<i>Tribulus terrestris</i> L.	Herb	Native	Annual
Monocotyledons				
Alismataceae				
1.	<i>Alisma oligococcum</i> F. Muell	Herb	Native	Perennial
2.	<i>Alisma plantago-aquatica</i> L.	Herb	Exotic	Perennial
3.	<i>Limmophytus obtusifolium</i> (L.) Miq.	Herb	Exotic	Annual
4.	<i>Sagittaria sagittifolia</i> L.	Herb	Native	Perennial
Amaryllidaceae				
1.	<i>Allium cepa</i> L.	Herb	Exotic	Annual
2.	<i>Allium sativum</i> L.	Herb	Exotic	Annual
3.	<i>Amaryllis belladonna</i> L.	Herb	Exotic	Perennial
4.	<i>Crinum asiaticum</i> L.	Herb	Native	Perennial
5.	<i>Crinum latifolium</i> L.	Herb	Native	Perennial
6.	<i>Curculigo capitulata</i> Kuntze	Herb	Exotic	Perennial
7.	<i>Curculigo latifolia</i> Dry.	Herb	Exotic	Perennial
8.	<i>Eucharis amazonica</i> Linden ex. Planch.	Herb	Exotic	Perennial
9.	<i>Hippeastrum vittatum</i> Herb.	Herb	Exotic	Perennial
10.	<i>Narcissus jonquilla</i> L.	Herb	Exotic	Perennial
11.	<i>Narcissus poeticus</i> L.	Herb	Exotic	Perennial
12.	<i>Narcissus pseudonarcissus</i> L.	Herb	Exotic	Perennial
13.	<i>Narcissus tazetta</i> L.	Herb	Exotic	Perennial
14.	<i>Zephyranthes citrina</i> Baker	Herb	Exotic	Perennial
15.	<i>Zephyranthes rosea</i> Lindl.	Herb	Exotic	Perennial
Araceae				
1.	<i>Aglaonema commutatum</i> Schott	Herb	Exotic	Perennial
2.	<i>Alocasia indica</i> (Roxb.) Schott	Herb	Native	Perennial
3.	<i>Alocasia lowii</i> Hook.	Herb	Native	Perennial
4.	<i>Alocasia sanderiana</i> (Schott) G. Don	Herb	Exotic	Perennial
5.	<i>Amorphophallus paeoniifolius</i> (Dennst) Nicolson	Herb	Native	Perennial
6.	<i>Anthurium andraeanum</i> Lind.	Herb	Exotic	Perennial
7.	<i>Arisaema atrorubens</i> Blume	Herb	Exotic	Perennial
8.	<i>Caladium bicolor</i> Vent	Herb	Exotic	Perennial
9.	<i>Caladium picturatum</i> Koch.	Herb	Exotic	Perennial
10.	<i>Dieffenbachia picta</i> Schott	Herb	Exotic	Perennial
11.	<i>Colocasia antiquorum</i> L.	Herb	Exotic	Perennial
12.	<i>Colocasia esculenta</i> (L.) Schott	Herb	Native	Perennial
13.	<i>Epipremnum aureum</i> (L.) Engl.	Herb	Native	Perennial
14.	<i>Lemna minor</i> L.	Herb	Native	Perennial
15.	<i>Monstera deliciosa</i> Liebm	Herb	Exotic	Perennial
16.	<i>Pistia stratiotes</i> L.	Herb	Exotic	Perennial
17.	<i>Scindapsus officinalis</i> (Roxb.) Schott	Herb	Native	Perennial
18.	<i>Scindapsus pictus</i> Hassk.	Herb	Exotic	Perennial
19.	<i>Spirodela polyriza</i> (L.) Schleid	Herb	Native	Perennial
20.	<i>Wolffia arhiza</i> (L.) Horkel ex Wimm.	Herb	Exotic	Perennial
21.	<i>Wolffia microscopica</i> Kurz.	Herb	Exotic	Perennial
Arecaceae				
1.	<i>Archotophoenix alexandrae</i> (F. Muell.) H. Wendl. & Drude	Tree	Exotic	Perennial
2.	<i>Areca catechu</i> L.	Tree	Exotic	Perennial
3.	<i>Areca triandra</i> Roxb. ex Buch.-Ham.	Tree	Native	Perennial
4.	<i>Arenga pinnata</i> (Wurmb) Merr.	Tree	Native	Perennial
5.	<i>Bactris major</i> Jacq.	Tree	Exotic	Perennial
6.	<i>Borassus flabellifer</i> L.	Tree	Exotic	Perennial

7.	<i>Caryota mitis</i> L.	Tree	Exotic	Perennial
8.	<i>Caryota urens</i> L.	Tree	Exotic	Perennial
9.	<i>Chamaerops humilis</i> L.	Shrub	Exotic	Perennial
10.	<i>Cocos nucifera</i> L.	Tree	Native	Perennial
11.	<i>Dyopsis lutescens</i> (H. Wendl.) Beentje & J. Dransf.	Herb	Exotic	Perennial
12.	<i>Livistona chinensis</i> R. Br.	Tree	Exotic	Perennial
13.	<i>Heterospatha elata</i> Scheff.	Tree	Exotic	Perennial
14.	<i>Phoenix dactylifera</i> L.	Tree	Exotic	Perennial
15.	<i>Phoenix rupicola</i> T. Anders.	Tree	Native	Perennial
16.	<i>Phoenix sylvestris</i> (L.) Roxb.	Tree	Native	Perennial
17.	<i>Raphis excelsa</i> (Thunb.) A. Henry	Shrub	Exotic	Perennial
18.	<i>Roystonea regia</i> (Kunth.) f. Cook	Tree	Exotic	Perennial
Asparagaceae				
1.	<i>Agave americana</i> L.	Shrub	Exotic	Perennial
2.	<i>Agave desmettiana</i> Jacobi	Shrub	Exotic	Perennial
3.	<i>Agave vera-cruz</i> Miller	Shrub	Exotic	Perennial
4.	<i>Agave wightii</i> Drumm. & Prain	Shrub	Exotic	Perennial
5.	<i>Asparagus aethiopicus</i> L.	Herb	Exotic	Perennial
6.	<i>Asparagus officinalis</i> L.	Herb	Exotic	Perennial
7.	<i>Asparagus racemosus</i> Willd.	Herb	Native	Perennial
8.	<i>Asparagus setaceus</i> (Kunth) Jessop	Herb	Exotic	Perennial
9.	<i>Asparagus densiflorus</i> (Kunth) Jessop	Herb	Exotic	Perennial
10.	<i>Beaucarnea recurvata</i> Lem.	Shrub	Exotic	Perennial
11.	<i>Chlorophytum comosum</i> (Thunb.) Jacq.	Herb	Exotic	Perennial
12.	<i>Dracaena braunii</i> Engl.	Shrub	Exotic	Perennial
13.	<i>Dracaena fragrans</i> (L.) Ker Gawl.	Shrub	Exotic	Perennial
14.	<i>Dracaena reflexa</i> Lam.	Shrub	Exotic	Perennial
15.	<i>Drimia indica</i> (Roxb.) Jessop	Herb	Native	Perennial
16.	<i>Furcraea gigantea</i> Vent.	Herb	Exotic	Perennial
17.	<i>Nolina brittoniana</i> Nash	Shrub	Exotic	Perennial
18.	<i>Polygonum tuberosum</i> L.	Herb	Exotic	Perennial
19.	<i>Ruscus aculeatus</i> L.	Shrub	Native	Perennial
20.	<i>Sansevieria trifasciata</i> Prain	Herb	Exotic	Perennial
21.	<i>Yucca gloriosa</i> L.	Shrub	Exotic	Perennial
22.	<i>Yucca aloifolia</i> L.	Shrub	Exotic	Perennial
Cannaceae				
1.	<i>Canna glauca</i> L.	Herb	Exotic	Perennial
2.	<i>Canna</i> hybrid	Herb	Exotic	Perennial
3.	<i>Canna indica</i> L.	Herb	Exotic	Perennial
Colchicaceae				
1.	<i>Gloriosa superba</i> L.	Herb	Native	Perennial
2.	<i>Colchicum leuteum</i> L.	Herb	Exotic	Annual
Commelinaceae				
1.	<i>Aneilema nudiflorum</i> R. Br.	Herb	Native	Annual
2.	<i>Commelina benghalensis</i> L.	Herb	Native	Annual
3.	<i>Commelina caroliniana</i> Walter	Herb	Native	Annual
4.	<i>Commelina diffusa</i> Burm. F.	Herb	Native	Annual
5.	<i>Commelina forskaolii</i> Hochst ex. C. B. Clarke	Herb	Native	Annual
6.	<i>Commelina kurzii</i> C. B. Clarke	Herb	Native	Annual
7.	<i>Commelina longifolia</i> Lam.	Herb	Native	Annual
8.	<i>Cyanotis axillaris</i> Schult.	Herb	Native	Annual
9.	<i>Tradescantia spathacea</i> L.	Herb	Exotic	Perennial
10.	<i>Tradescantia virginiana</i> L.	Herb	Exotic	Perennial

11.	<i>Tradescantia zebrina</i> (Schinz) D. R. Hunt	Herb	Exotic	Perennial
	Costaceae			
1.	<i>Cheilocostus speciosus</i> (J. Konej) C. Specht	Herb	Exotic	Perennial
	Cyperaceae			
1.	<i>Bulbostylis barbata</i> Kunth.	Herb	Native	Annual
2.	<i>Carex cruciata</i> Wah.	Herb	Exotic	Perennial
3.	<i>Cyperus alulatus</i> Kern	Herb	Native	Annual
4.	<i>Cyperus aristatus</i> Roxb.	Herb	Exotic	Annual
5.	<i>Cyperus compressus</i> L.	Herb	Native	Annual
6.	<i>Cyperus corymbosus</i> Rottb.	Herb	Exotic	Annual
7.	<i>Cyperus difformis</i> L.	Herb	Native	Annual
8.	<i>Cyperus digitatus</i> Roxb.	Herb	Native	Perennial
9.	<i>Cyperus exaltatus</i> Retz.	Herb	Native	Perennial
10.	<i>Cyperus halpan</i> L.	Herb	Native	Perennial
11.	<i>Cyperus iria</i> L.	Herb	Native	Annual
12.	<i>Cyperus michelianus</i> (L.) Link	Herb	Native	Annual
13.	<i>Cyperus platystylis</i> R. Br.	Herb	Native	Perennial
14.	<i>Cyperus rotundus</i> R. Br.	Herb	Exotic	Perennial
15.	<i>Cyperus scariosus</i> L.	Herb	Exotic	Perennial
16.	<i>Cyperus tenuispica</i> Steud.	Herb	Native	Annual
17.	<i>Eleocharis acutangula</i> (Roxb.) Schult.	Herb	Native	Perennial
18.	<i>Eleocharis atropurpurea</i> (Retz.) J. Presl & C. Presl	Herb	Native	Annual
19.	<i>Eleocharis capitata</i> (L.) R. Br.	Herb	Exotic	Perennial
20.	<i>Eleocharis congesta</i> D. Don	Herb	Native	Perennial
21.	<i>Eleocharis dulcis</i> (Burm. F.) Trin. ex Hensch.	Herb	Native	Perennial
22.	<i>Eleocharis palustris</i> (L.) R. Br.	Herb	Exotic	Perennial
23.	<i>Eriophorum comosum</i> Wall. ex Nees	Herb	Exotic	Perennial
24.	<i>Fimbristylis aestivalis</i> (Retz.) Vahl	Herb	Native	Annual
25.	<i>Fimbristylis alboviridis</i> C. B. Clarke	Herb	Exotic	Perennial
26.	<i>Fimbristylis bisumbellata</i> (Forssk.) Bubani	Herb	Native	Annual
27.	<i>Fimbristylis dichotoma</i> (L.) Vahl	Herb	Exotic	Perennial
28.	<i>Fimbristylis eragrostis</i> (Nees & Meyen) Hance	Herb	Native	Perennial
29.	<i>Fimbristylis ferruginea</i> (L.) Vahl	Herb	Exotic	Perennial
30.	<i>Fimbristylis miliacea</i> (L.) Vahl	Herb	Native	Annual
31.	<i>Fimbristylis schoenoides</i> (Retz.) Vahl	Herb	Native	Annual
32.	<i>Fimbristylis tenera</i> Schult (Steud.) var. <i>oxylepis</i> Clarke	Herb	Native	Annual
33.	<i>Fimbristylis tetragona</i> R. Br.	Herb	Native	Annual
34.	<i>Fimbristylis tomentosa</i> Vahl	Herb	Native	Annual
35.	<i>Kyllinga brevifolia</i> Rott.	Herb	Exotic	Perennial
36.	<i>Kyllinga bulbosa</i> P. Beauv.	Herb	Native	Perennial
37.	<i>Kyllinga melanosperma</i> Nees	Herb	Native	Perennial
38.	<i>Kyllinga nemoralis</i> (J. R. & G. Forst) Dandy ex. Hutch	Herb	Native	Perennial
39.	<i>Kyllinga triceps</i> Rottb.	Herb	Exotic	Annual
40.	<i>Lipocarpa squarrosa</i> (L.) Goetgh.	Herb	Native	Annual
41.	<i>Mariscus compactus</i> (Retz.) Boldingh	Herb	Native	Perennial
42.	<i>Mariscus concinnus</i> (J. R. & G. Forst) Dandy ex. Hutch	Herb	Native	Perennial

43.	<i>Mariscus squarrosus</i> (L.) Clarke	Herb	Native	Annual
44.	<i>Pycnus pumilus</i> (L.) Nees	Herb	Native	Annual
45.	<i>Schoenoplectus grossus</i> (L. f.) Palla	Herb	Native	Annual
46.	<i>Schoenoplectus juncooides</i> (Roxb.) Palla	Herb	Native	Annual
47.	<i>Schoenoplectus lateriflorus</i> (J. F. Gmelin) Lye	Herb	Native	Annual
48.	<i>Scirpus articulatus</i> L.	Herb	Native	Annual
49.	<i>Scirpus erectus</i> Poir	Herb	Exotic	Annual
50.	<i>Scirpus mucronatus</i> L.	Herb	Exotic	Perennial
51.	<i>Scirpus supinus</i> L.	Herb	Exotic	Annual
	Dioscoreaceae			
1.	<i>Diocorea bulbifera</i> L.	Herb	Native	Perennial
	Hydrocharitaceae			
1.	<i>Hydrilla verticillata</i> Royle	Herb	Native	Annual
2.	<i>Lagarosiphon roxburghii</i> Benth.	Herb	Native	Annual
3.	<i>Najas indica</i> (Willd.) Cham	Herb	Native	Annual
4.	<i>Najas minor</i> All.	Herb	Exotic	Annual
5.	<i>Nechamandra alternifolia</i> (Roxb.) Thw.	Herb	Native	Perennial
6.	<i>Ottelea alismoides</i> Pers.	Herb	Native	Annual
7.	<i>Vallisneria spiralis</i> L.	Herb	Native	Annual
	Juncaceae			
1.	<i>Juncus bufonius</i> L.	Herb	Native	Annual
	Musaceae			
1.	<i>Musa paradisiaca</i> L.	Herb	Native	Perennial
2.	<i>Ravenala madagascariensis</i> Gmel.	Herb	Exotic	Perennial
	Pandanaceae			
1.	<i>Pandanus tectorius</i> Soland. ex Parkinson	Shrub	Native	Perennial
	Poaceae			
1.	<i>Avena fatua</i> L.	Herb	Exotic	Annual
2.	<i>Bambusa bambos</i> Voss.	Woody grass	Native	Perennial
3.	<i>Bambusa tulda</i> Roxb.	Woody grass	Native	Perennial
4.	<i>Bambusa vulgaris</i> Schrad.	Woody grass	Native	Perennial
5.	<i>Bothriochloa pertusa</i> (Willd.) A. Camus	Herb	Native	Perennial
6.	<i>Brachiaria ramosa</i> (L.) Stapf	Herb	Exotic	Annual
7.	<i>Chloris barbata</i> Sweet	Herb	Exotic	Perennial
8.	<i>Chloris incompleta</i> Roth.	Herb	Exotic	Perennial
9.	<i>Chrysopogon zizanioides</i> (L.) Roberty	Herb	Native	Perennial
10.	<i>Cymbopogon citratus</i> (DC.) Stapf	Herb	Native	Annual
11.	<i>Cymbopogon flexuosus</i> (Steud.) Wats.	Herb	Native	Perennial
12.	<i>Cynodon dactylon</i> (L.) Pers.	Herb	Exotic	Perennial
13.	<i>Dactyloctenium aegyptium</i> Beauv.	Herb	Native	Annual
14.	<i>Dendrocalamus strictus</i> Nees	Woody grass	Native	Perennial
15.	<i>Desmostachya bipinnata</i> (L.) Stapf	Herb	Native	Perennial
16.	<i>Dichanthium annulatum</i> (L.) Stapf	Herb	Native	Perennial
17.	<i>Digitaria marginata</i> Beauv.	Herb	Native	Annual
18.	<i>Digitaria sanguinalis</i> (L.) Scop.	Herb	Native	Annual
19.	<i>Echinochloa colonum</i> (L.) Link	Herb	Native	Annual
20.	<i>Echinochloa crus-galli</i> (L.) P. Beauv.	Herb	Native	Annual
21.	<i>Eleusine indica</i> (L.) Gaertn.	Herb	Native	Annual
22.	<i>Elymus repens</i> (L.) Gould	Herb	Native	Perennial
23.	<i>Eragrostis amabilis</i> (L.) Wt. & Arn. ex Nees	Herb	Exotic	Annual
24.	<i>Eragrostis ciliaris</i> (L.) R. Br.	Herb	Native	Annual
25.	<i>Eragrostis elongata</i> Nees	Herb	Exotic	Annual
26.	<i>Eragrostis pilosa</i> (L.) P. Beauv.	Herb	Native	Perennial
27.	<i>Eragrostis unioides</i> Nees	Herb	Native	Annual
28.	<i>Eragrostis viscosa</i> (Retz.) Trin.	Herb	Native	Annual

29.	<i>Eulaliopsis binata</i> (Retz.) C. E. Hubbard	Herb	Native	Perennial
30.	<i>Hordeum vulgare</i> L.	Herb	Exotic	Annual
31.	<i>Hygroryza aristata</i> (Retz.) Nees ex Wt. & Arn.	Herb	Native	Annual
32.	<i>Imperata cylindrica</i> Rausch.	Herb	Native	Perennial
33.	<i>Oplismenus burmanii</i> (Retz.) P. Beauv.	Herb	Exotic	Annual
34.	<i>Oplismenus compositus</i> (L.) P. Beauv.	Herb	Native	Perennial
35.	<i>Oryza sativa</i> L.	Herb	Native	Annual
36.	<i>Panicum psilopodium</i> Trin.	Herb	Native	Annual
37.	<i>Paspalidium flavidum</i> A. Camus	Herb	Native	Perennial
38.	<i>Paspalum scorbiculatum</i> L.	Herb	Exotic	Annual
39.	<i>Phalaris minor</i> L.	Herb	Exotic	Annual
40.	<i>Pennisetum typhoides</i> (Burm. F.) Stapf & Hubbard	Herb	Exotic	Annual
41.	<i>Poa annua</i> L.	Herb	Exotic	Annual
42.	<i>Polypogon monspeliensis</i> (L.) Desf.	Herb	Exotic	Annual
43.	<i>Rottboellia exaltata</i> L. f.	Herb	Native	Perennial
44.	<i>Saccharum munja</i> Roxb.	Herb	Native	Perennial
45.	<i>Saccharum spontaneum</i> L.	Herb	Native	Perennial
46.	<i>Saccharum officinarum</i> L.	Shrub	Native	Perennial
47.	<i>Setaria tomentosa</i> (Roxb.) Kunth.	Herb	Native	Annual
48.	<i>Setaria verticillata</i> (L.) P. Beauv.	Herb	Exotic	Annual
49.	<i>Setaria viridis</i> (L.) P. Beauv.	Herb	Exotic	Annual
50.	<i>Sorghum halepense</i> Pers.	Herb	Exotic	Perennial
51.	<i>Sorghum vulgare</i> (L.) Pers.	Herb	Exotic	Annual
52.	<i>Sporobolus diander</i> (Retz.) P. Beauv.	Herb	Exotic	Perennial
53.	<i>Sporobolus tetragonus</i> R. Br.	Herb	Exotic	Perennial
54.	<i>Triticum aestivum</i> L.	Herb	Exotic	Annual
55.	<i>Zea mays</i> L.	Herb	Exotic	Annual
Pontederiaceae				
1.	<i>Eichhornia crassipes</i> Solms.	Herb	Exotic	Perennial
2.	<i>Monochoria vaginalis</i> (Burm. F.) C. Presl. ex Kunth	Herb	Native	Annual
Potamogetonaceae				
1.	<i>Potamogeton crispus</i> L.	Herb	Exotic	Perennial
2.	<i>Potamogeton indicus</i> Roxb.	Herb	Native	Perennial
3.	<i>Stuckenia pectinata</i> (L.) Boerner	Herb	Native	Perennial
Smilacaceae				
1.	<i>Smilax zeylanica</i> L.	Woody climber	Native	Perennial
Typhaceae				
1.	<i>Typha latifolia</i> L.	Herb	Exotic	Perennial
Xanthorrhoeaceae				
1.	<i>Aloe arborescens</i> Mill.	Shrub	Exotic	Perennial
2.	<i>Aloe vera</i> (L.) Burm.	Shrub	Exotic	Perennial
3.	<i>Asphodelus tenuifolius</i> L.	Herb	Native	Annual
Zingiberaceae				
1.	<i>Alpinia purpurata</i> K. Schum	Herb	Exotic	Perennial
2.	<i>Alpinia zerumbet</i> (Pers.) B. L. Burtt & R. M. Smith	Herb	Exotic	Perennial
3.	<i>Curcuma longa</i> L.	Herb	Native	Biennial
4.	<i>Elettaria cardamomum</i> (L.) Maton	Herb	Native	Perennial
5.	<i>Zingiber officinale</i> Rosc.	Herb	Native	Biennial

Table 2: Analysis of genera, species, families, origin status and duration of the flora of Varanasi district in Uttar Pradesh state of India

Group	Genera	Species	Families	Origin status		Duration		
				Native	Exotic	Annual	Biennial	Perennial
Dicotyledons	470	785	94	343	442	300	15	470
Monocotyledons	131	230	22	115	115	78	2	150
Total	601	1015	116	458	557	378	17	620

Table 3: Ten dominant families of the flora of Varanasi district in the Uttar Pradesh state of India

S. No.	Families	Genera	Species
1.	Fabaceae	55	104
2.	Asteraceae	51	75
3.	Poaceae	37	55
4.	Cyperaceae	12	51
5.	Malvaceae	23	43
6.	Euphorbiaceae	11	38
7.	Amaranthaceae	18	29
8.	Apocynaceae	22	28
9.	Lamiaceae	17	27
10.	Acanthaceae	16	25

Euphorbia royleana, *Euphorbia santapau*, *Euphorbia trigona*, *Euphorbia vajravelui*, *Martynia annua*, *Phoenix rupicola*, *Rauvolfia serpentina*, *Saraca indica*, *Striga asiatica*, *Orobancha aegyptiaca*, *Swietenia mahagoni* and *Smilax zelanica*.

The common woody flora observed along roadsides of the Varanasi district are represented by *Alstonia scholaris*, *Albizia lebbek*, *Azadirachta indica*, *Cassia fistula*, *Acacia nilotica*, *Anthocephalus cadamba*, *Bauhinia purpurea*, *Ceiba speciosa*, *Dalbergia sissoo*, *Delonix regia*, *Terminalia bellerica*, *Eucalyptus globulus*, *Eucalyptus hybrid*, *Eucalyptus rostrata*, *Eucalyptus tereticornis*, *Ficus benghalensis*, *Ficus religiosa*, *Ficus virens* var. *sublanceolata*, *Melia azedarach*, *Millettia pinnata*, *Mangifera indica*, *Moringa oleifera*, *Polyalthia longifolia* var. *pendula*, *Prosopis juliflora*, *Senna siamea*, *Syzygium cumini* and *Tamarindus indicus*.

The most common flora observed on the walls of Varanasi district are represented by *Achyranthes aspera*, *Peristrophe bicalyculata*, *Lindenbergia indica*, *Bidens biternata*, *Boerhavia diffusa*, *Euphorbia hirta*, *Euphorbia thymifolia*, *Chloris virgata*, *Tridax procumbens*, *Eragrostis amabilis*, *Trianthema portulacastrum*, *Ficus benghalensis*, *Ficus religiosa*, *Ficus glomerata* and *Ficus virens* var. *sublanceolata*.

Alhagi maurorum, *Potentilla glandulosa*, *Potentilla supina*, *Ranunculus sceleratus*, *Chrozophora rottleri*, *Rumex dentatus*, *Persicaria amphibia*, *Persicaria capitata*, *Persicaria glabra*, *Persicaria hydropiper*, *Persicaria longiseta*, *Persicaria orientalis*, *Persicaria pubescens*, *Persicaria serrulata*, *Verbascum chinense*, *Gnaphalium polycaulon* and *Phyla nodiflora* are the common flora observed along the river banks of Varanasi district.

The most common weeds observed in the agricultural fields of the Varanasi district are represented by *Corchorus aestuans*, *Corchorus olitorius*, *Chorchorus trilocularis*, *Cyperus iria*, *Cyperus rotundus*, *Cynodon dactylon*, *Euphorbia hirta*, *Phyllanthus niruri*, *Phyllanthus simplex*, *Echinochloa colonum*, *Oldenlandia corymbosa*, *Oldenlandia diffusa*, *Chenopodium album*, *Digera arvensis*, *Leucas aspera*, *Phalaris minor*, *Oxalis corniculata*, *Amaranthus viridis*, *Anagallis arvensis*, *Asphodelus tenuifolius*, *Celosia argentea*, *Lathyrus sativus*, *Rungia pectinata*, *Plectranthus amboinicus*, *Fumaria indica*, *Echinops echinatus*, *Gnaphalium indicum*, *Melilotus alba*, *Portulaca oleracea*, *Taraxacum officinale*, *Launaea procumbens*, *Lindernia ciliata*, *Lindernia crustacea*, *Solanum nigrum* and *Vernonia cinerea*.

Xanthium strumarium, *Datura metel*, *Calotropis procera*, *Calotropis gigantea*, *Senna tora*, *Senna angustifolia*, *Parthenium hysterophorus*, *Amaranthus spinosus*, *Solanum virginianum*, *Argemone mexicana*, *Peristrophe bicalyculata*, *Dichanthium annulatum* and *Bothriochloa pertusa* were the most common plant species observed on the wastelands of Varanasi district.

The common aquatic flora observed in the Varanasi district are represented by *Eichhornia crassipes*, *Typha latifolia*, *Pistia stratiotes*, *Lemna minor*, *Nymphaea nouchali*, *Ottelia alismoides*, *Potamogeton indicus*, *Potamogeton crispus*, *Monochoria vaginalis*, *Nymphoides hydrophylla*, *Ceratophyllum demersum*, *Hydrilla verticillata*, *Vallisneria spiralis*, *Wolffia arizha*, *Wolffia microscopica*, *Sagittaria sagittifolia*, *Utricularia stellaris*, *Spirodela polyryza*, *Najas indica* and *Najas minor*.

Parthenium hysterophorus, *Lantana camara*,

Ageratum conyzoides and *Eichhornia crassipes* are the main exotic invading flora observed in the Varanasi district.

CONCLUSION

It can be concluded from the study that Varanasi district in Uttar Pradesh state of India hosts a large variety of plant species dominated by Fabaceae, Asteraceae and Poaceae families. The exotic plant species were greater in number compared to native plant species in the flora of Varanasi district. Furthermore, the plants of perennial duration exceeds the number of annual and biennial duration plants in the flora of Varanasi district.

REFERENES

- Ahmed A (1999). India: A General Geography, NCERT Publications, New Delhi, India, pp. 66-76.
- Ahamed N and Gupta AK (2010). Analysis of flora of Baghpat district in Uttar Pradesh, India. Indian J. For. **33** (3): 405-418.
- APG III (2009). An update of the Angiosperm Phylogeny Group of classification for the orders and families of flowering plants: APG-III. Bot. J. Linn. Soci. 161: 105-121.
- Bor NL (1960). The Grasses of Burma, Ceylon, India and Pakistan, Pergamon Press, Oxford, U.K.
- Duthie JF (1903-1922). Flora of the Upper Gangetic Plain and of the Adjacent Siwalik and Sub-Himalayan Tracts 3 Vols., Government of India, Central Publication Branch, Calcutta, India.
- Hooker JD (1875-1897). Flora of British India, 7 Vols., Rep. 1983-2003. Bishen Singh Mahendra Pal Singh, Dehra Dun, India.
- Hooker JD (1904). A Sketch of the Flora of British India. Rep. 1979. Bishen Singh Mahendra Pal Singh, Dehra Dun, India.
- Jain SK (1983). Flora and Vegetation of India- An Outline. Botanical Survey of India, Department of Environment, New Delhi, India.
- Jain SK and Rao RR (1997). Flora and Phytogeography of India. National Botanical Research Institute, Lucknow, India.
- Jha AK and Singh JS (1992). Influence of microsite on redevelopment of vegetation on coalmine spoils in a dry tropical environment. J. Environ. Manage. 36: 95-116.
- Kanodia KC Trivedi BK and Shankar V (1983). Grazing resources of Bundelkhand region. Indian J. For. 6(1): 32-42.
- Kirtikar KR and Basu BD (1975). Indian Medicinal Plants. 4 Vols. Bishan Singh, Mahendra Pal Singh, Dehra Dun, India.
- Maheshwari JK (1963). The Flora of Delhi, CSIR, New Delhi, India.
- Mishra BK and Verma BK (1992). Flora of Allahabad District. Bishen Singh Mahendra Pal Singh, Dehra Dun, India.
- Nagar PS Pathak SJ and Pandya SM (2004). The alien flora of the Barda Hills and its surroundings in Gujarat, India. Indian J. For. 27(1): 25-38.
- Narain S (2010). Observations on the flora of Hamirpur and Mahoba districts of the Uttar Pradesh India. Indian J. For. 33(3): 455-462.
- Sinha BK (1990). Biological spectrum of Banda district. Geob. 9: 143-146.
- Tomar A Singh H and Singh V (2008). Exotic elements in the flora of Baghpat district, Uttar Pradesh. Indian J. For. 31(3): 463-471.
- Trivedi BK Roy RD and Pathak PS (1979). Studies on the vegetation of Bundelkhand forest division, Jhansi-Herbaceous vegetation. Indian For. 105: 527-538.
- Verma BK and Ranjan V (1995). Flora of Lalitpur (U.P.). In: Taxonomy and Biodiversity. Pandey AK (ed.), Delhi, India, pp. 87-94.
- Verma BK and Shukla G (1997). On the flora and phytogeography of Jalaun district, U. P. In: Higher Plants of Indian Sub-continent. Gupta, B. K. (ed.) Volume 6, Bishen Singh Mahendra Pal Singh, Dehra Dun, India, pp. 153-163.