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## Angiospermic plants found in University campus Kota Rajasthan, India

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### ABSTRACT

An attempt was made to prepare a floristic account of various Angiospermic plants found in University campus Kota. Extensive surveys were conducted in different seasons for consecutive years to analyse plant wealth found in this region. During investigation a total of 184 plant species were recorded. Of the total flora recorded species of family Fabaceae were maximum followed by Poaceae and Amaranthaceae.

**Keywords:** Angiosperms, Flora, habit, vegetation

### 1. INTRODUCTION

Plants play an important role in estimating and maintaining ecological balance of nature. Flora refers to all plants occurring in a geographical location. A complete flora of a place reflects the whole plant diversity of that area. Vegetation is an overall expression of various environmental factors which operates in an area. Floristic study documents all the plant species found within a specific geographical area. It provides reliable information about the distribution, nomenclature, ecology and its utility.

### 2. METHODOLOGY

An extensive field survey was conducted in different seasons during the session 2021-22 of university campus to prepare a list of plant species found within campus. Identification was done with the help of different flora and herbaria of Rajasthan (Bhandari, 1990; Singh and Shetty, 1987-93; Sharma, 2002). The following table 1. depicts various Angiospermic species found in University campus Kota.

**Table 1: List of Angiosperm plant species along with their family, local name, habit.**

Sr. No	Binomial nomenclature	Local Name	Family	Habit
01.	<i>Abutilon indicum</i> (L.) Sweet	Mudra	Malvaceae	Shrub
02.	<i>Acacia auriculiformis</i> cunn ex benth	Darwin black wattle	Fabaceae	Tree
03.	<i>Acacia nilotica</i> (L.) Del	Babul	Mimosaceae, Fabaceae	Tree
04.	<i>Acacia senegal</i>	Gum acacia	Fabaceae	Tree
05.	<i>Acalypha indica</i>	Dadaro	Euphorbiaceae	Shrub
06.	<i>Acalypha wilkesiana</i> Mull.Arg.	Copper leaf	Euphorbiaceae	Shrub
07.	<i>Achyranthus aspera</i> L.	Aghada	Amaranthaceae	Herb
08.	<i>Adhatoda vasica</i> (Nees)	Vasuti	Acanthaceae	Shrub
09.	<i>Aegle marmelos</i> (L.) Corr	Bel	Rutaceae	Tree
10.	<i>Agave vivipara</i> L.	Century plant	Asparagaceae	Shrub

11.	<i>Ailanthus excelsa Roxb.</i>	Maharuk	Simaroubiaceae	Tree
12.	<i>Alamanda cathartica L.</i>	Golden trumpet	Apocynaceae	Shrub
13.	<i>Albizia lebbec (L.)</i>	Shiris	Caesalpinaceae, Fabaceae	Tree
14.	<i>Alternanthera brasiliana(L.) Kuntze</i>	Ruby leaf	Amaranthaceae	Shrub
15.	<i>Alternanthera denticulata</i>	Lesser joyweed	Amaranthaceae	Herb
16.	<i>Alternanthera porychonyoides</i>	Paronichyoides	Amaranthaceae	Herb
17.	<i>Alternanthera pungens(L.)R.Br ex DC</i>	Sissoo spinach	Amaranthaceae	Herb
18.	<i>Alternanthera sessilis</i>	Joyweed	Amaranthaceae	Herb
19.	<i>Anagallis arvensis (L.)</i>	Poor man's barometer	Primulaceae	Herb
20.	<i>Antigone leptopus Hook&amp;Arn</i>	Coralvine	Polygonaceae	Climber
21.	<i>Antigonon leptopus Hook and Arn</i>	Coralvine	Polygonaceae	Herb
22.	<i>Arundo donax</i>			
23.	<i>Asparagus racemosus wild</i>	Shatawari	Liliaceae	Herb
24.	<i>Asparagus racemosus Willd</i>	Shatavari	Asparagaceae	Climber
25.	<i>Azadirachta indica A.Juss</i>	Neem	Meliaceae	Tree
26.	<i>Azadirachta indica A.Juss</i>	Neem	Meliaceae	Tree
27.	<i>Bacopa monnieri (L.)Wettst.</i>	Herb of grace	Plantaginaceae	Herb
28.	<i>Barleria prionitis (Linn)</i>	Baansa	Acanthaceae	Shrub
29.	<i>Bauhinia variegata</i>	Mountain ebony	Fabaceae	Tree
30.	<i>Bergia ammannioides</i>	Ammannia waterwort	Elatinaceae	Herb
31.	<i>Boerhavia diffusa</i>	Punarnawa	Nyctaginaceae	Herb
32.	<i>Boerhavia repens</i>	Hogweed	Nyctaginaceae	Herb
33.	<i>Bougainvillea glabra choisy</i>	Paper flower	Nyctaginaceae	Shrub
34.	<i>Brassica juncea(L.)czern</i>	Brown mustard	Brassicaceae	Shrub
35.	<i>Brassica napusL.</i>	Rape	Brassicaceae	Shrub
36.	<i>Butea monosperma</i>	Palash	Fabaceae	Tree
37.	<i>Caesalpinia pulcherrima(L.)Sw</i>	Pride of Barbados	Fabaceae	Tree
38.	<i>Calotropis gigantea (R.Br.)</i>	Safed Akara	Asclepiadaceae	Tree
39.	<i>Calotropis procera R. Br</i>	Arka Tree	Asclepiadaceae	Tree
40.	<i>Canna indica (L.)</i>	Indianshot	Cannaceae	Herb
41.	<i>Carissa spinarum (Linn)</i>	Karonda	Apocynaceae	Shrub
42.	<i>Cassia fistula (L.)</i>	Golden shower	Caesalpinaceae, Fabaceae	Tree
43.	<i>Catharanthus roseus (L)G.Don.</i>	Pink periwinkle	Apocynaceae	Shrub
44.	<i>Centella asiatica (L.)urban</i>	Gotucola	Apiaceae	Herb
45.	<i>Centella asiatica (L.)urban</i>	Gotukola	Apiaceae	Herb
46.	<i>Chenopodium album (L.)</i>	Wildspinach	Amaranthaceae	Herb
47.	<i>Chenopodium album L.</i>	White goosefoot	Amaranthaceae	Herb
48.	<i>Chorchorus aestuans L.</i>	East Indian mallow	Malvaceae	Shrub
49.	<i>Chorchorus capsularis L.</i>	White jute	Malvaceae	Shrub
50.	<i>Chorchorus trilocularis L.</i>	Whitejute	Malvaceae	Shrub
51.	<i>Chloris virgata</i>	Feather finger grass	Poaceae	Grass
52.	<i>Cleomeviscosa L.</i>	Tick weed	Cleomaceae	Shrub
53.	<i>Clitoria ternatea L.</i>	Bluebellvine	Fabaceae	Shrub
54.	<i>Coccinia grandis (L.)voigt</i>	Ivy gourd	Cucurbitaceae	Herb
55.	<i>Cocculus hirsutus(L.)Diels.</i>	Broom creeper	Menispermaceae	Creeper
56.	<i>Combretum indicum L.De Filippis syn. Quisqualis</i>	Rangoon creeper	Combretaceae	Shrub
57.	<i>Convolvulus arvensis (L.)</i>	Bindweed	Convolvulaceae	Herb

58.	<i>Cordyline fruticosa(L.)A.Chev</i>	Ti plant	Asparagaceae	Shrub
59.	<i>Cosmos sulphureus cav.</i>	Yellow cosmos	Asteraceae	Herb
60.	<i>Crinum asiaticum L.</i>	Spider lily	Amaryllidaceae	Herb
61.	<i>Crinum asiaticum L.</i>	Mangrove lily	Amaryllidaceae	Herb
62.	<i>Croton bonplandianum</i>	Ban tulusi	Euphorbiaceae	Shrub
63.	<i>Cucumis melo L.</i>	Melon	Cucurbitaceae	Climber
64.	<i>Cycus circinalis</i>	Cycus	Cycadaceae	Tree
65.	<i>Cynodon dactylon (L.)Pers</i>	Bermuda grass	Poaceae	Herb
66.	<i>Dactyloctenium aegyptium (L.) Willd.</i>	Crowfoot grass	Poaceae	Herb
67.	<i>Dalbergia sisso Roxb.</i>	Shisham	Fabaceae	Tree
68.	<i>Datura innoxiaMill.</i>	Recurrent thorn apple	Solanaceae	Shrub
69.	<i>Datura stramonium L.</i>	Jimson weed	Solanaceae	Shrub
70.	<i>Desmodium incanum DC.</i>	Creeping beggar weed	Fabaceae	Herb
71.	<i>Dianthus barbatus L.</i>	Sweet williams	Caryophyllaceae	Herb
72.	<i>Dichondra micrantha Urb.</i>	Lawnleaf	Convolvulaceae	Herb
73.	<i>Dichrostachys cinerea Wight et Arm</i>	Sickle bush	Caesalpiniaceae, Fabaceae	Herb
74.	<i>Dieffenbachia seguine(Jacq.)Schott</i>	Dumb cane	Araceae	Shrub
75.	<i>Digitaria ciliaris(Retz.) Koeler</i>	Finger grass	Poaceae	Herb
76.	<i>Draconian trifasciata (Prain)Mabb syn sansevieria</i>	Snake plant	Asparagaceae	Shrub
77.	<i>Duranta erecta</i>	Golden dew drops	Verbenaceae	Shrub
78.	<i>Dyopsis lutescence(H.Wendl) Beentje and J. Dransf</i>	Areca palm	Arecaceae	Shrub
79.	<i>Echinops spinosissimus.Turra</i>		Apocynaceae	Herb
80.	<i>Eclipta prostrata(L.)L</i>	Bhringraj	Asteraceae	Herb
81.	<i>Eragrostis unioides</i>	Lovegrass	Poaceae	Herb
82.	<i>Euphorbia hirta L.</i>	Asthma plant	Euphorbiaceae	Herb
83.	<i>Euphorbia milli Des Moul.</i>	Christ thorn	Euphorbiaceae	Shrub
84.	<i>Evolvulus alsinoides (L.)</i>	Dwarf morning glory	Convolvulaceae	Herb
85.	<i>Ficus benamina L.</i>	Weeping fig	Moraceae	Tree
86.	<i>Ficus glomerata L.</i>	Gular	Moraceae	Tree
87.	<i>Ficus religiosa L.</i>	Sacred fig	Moraceae	Tree
88.	<i>Furcraea foetida (L.)Haw</i>	Mauritius Hemp	Asparagaceae	Herb
89.	<i>Gomphrena celosiodes Mart</i>	Pigweed	Amaranthaceae	Herb
90.	<i>Gomphrena serrata L.</i>	Arrasa contodo	Amaranthaceae	Shrub
91.	<i>Hibiscus rosa sinensis</i>	Rose mallow	Malvaceae	Shrub
92.	<i>Impatiens balsamna(L.)</i>	Balsum	Balsaminaceae	Herb
93.	<i>Indigofera linnaei Ali</i>	Nineleafed indigo	Fabaceae	Herb
94.	<i>Indigofera tinctoria L.</i>	True indigo	Fabaceae	Herb
95.	<i>Ipomoea carnea Jacq.</i>	Pink morning glory	Convolvulaceae	Shrub
96.	<i>Ipomoea obscura(L.)ker Gawl</i>	Small white morning glory	Convolvulaceae	Shrub
97.	<i>Ixora chinensis Lam.</i>	Chinese ixora	Rubiaceae	Shrub
98.	<i>Jacquemontia pentathos(Jacq)</i>	Skyblue clustervine	Convolvulaceae	Shrub
99.	<i>Jasminum officinale L.</i>	Common Jasmine	Oleaceae	Herb
100.	<i>Jasminum sambac(L.)Aston</i>	Arabian Jasmine	Oleaceae	Shrub
101.	<i>Jatropha curcusL.</i>	Poisonnut	Euphorbiaceae	Shrub/tree
102.	<i>Jatropha integrifolia L.</i>	Nettlespurge	Euphorbiaceae	Shrub
103.	<i>Kalanchoe crenata(Andrews)haw</i>	Neverdie	Crassulaceae	Shrub
104.	<i>Lannea coromandelica (Houtt.) Merr.</i>	Gumpena	Anacardiaceae	Tree
105.	<i>Lantana camara</i>	Common lantana	Verbenaceae	Shrub
106.	<i>Launea procumbens (Roxb)</i>	Jangigobi	Asteraceae	Herb
107.	<i>Lepidium didymum(L.)</i>	Lesser swine cress	Brassicaceae	Herb

108.	<i>Leucaenea leucocephala</i>	River tamarind	Caesalpiniaceae Fabaceae	Tree
109.	<i>Leucas aspera</i>	Dronapuspi	Lamiaceae	Herb
110.	<i>Mangifera indica (Linn)</i>	Aam	Anacardiaceae	Tree
111.	<i>Martynia annuaL.</i>	Cat's claw	Martyniaceae	Shrub
112.	<i>Milletia pinnata(L.)</i>	Panigrahi	Fabaceae	Tree
113.	<i>Mirabilis jalapa</i>	Four 'oclock	Nyctaginaceae	Shrub
114.	<i>Mitragyna parvifolia(Roxb.)Korth</i>	Guri	Rubiaceae	Tree
115.	<i>Momordica charantia L.</i>	Bitter melon	Cucurbitaceae	Herb
116.	<i>Morus nigra</i>	Black mulberry	Moraceae	Tree
117.	<i>Murraya koinigii(L.)Spreng.</i>	Currytree	Rutaceae	Tree
118.	<i>Musa paradisiaca L.</i>	Banana	Musaceae	Tree like herb
119.	<i>Mussenda erythrophylla Schumach and Thonn</i>	Ashanti blood	Rubiaceae	Shrub
120.	<i>Nerium oleander L.</i>	Oleander	Apocynaceae	Shrub
121.	<i>Ocimum basilicum L.</i>	Great basil	Lamiaceae	Shrub
122.	<i>Ocimum gratissimum L.</i>	Clove basil, wild basil	Lamiaceae	Shrub
123.	<i>Ocimum tenuifoliumL. Syn.O.&amp;sanctum</i>	Holy basil Syn.sanctum	Lamiaceae	Shrub
124.	<i>Pandanus amaryllifolius Roxb.</i>	Pandan	Pandanaceae	Herb
125.	<i>Parthenium hysterophorusL.</i>	Congress grass	Compositae	Shrub
126.	<i>Paspalum conjugatum</i>	Hilo grass	Poaceae	Herb
127.	<i>Paspalum dilatatumPoir.</i>	Dallis grass	Poaceae	Herb
128.	<i>Paspalum distichum L.</i>	Knot grass	Poaceae	Herb
129.	<i>Paspalum notatum Flugge.</i>	Bahia grass	Poaceae	Herb
130.	<i>Paspalum quadrifarium</i>		Poaceae	Herb
131.	<i>Pedaliium murexL.</i>	Gokhru	Pedaliaceae	Shrub
132.	<i>Pergularia daemia(Forssk.)चित्र.</i>	Trellis vine	Apocynaceae	Vine
133.	<i>Petunia hybrid horti ex E.Vilm.</i>	Nothospeaes	Solanaceae	Shrub
134.	<i>Phyllanthus amarus Schugn&amp; Thonn.</i>		Euphorbiaceae	Herb
135.	<i>Phyllanthus emblica L.</i>	Indian gooseberry	Phyllanthaceae	Tree
136.	<i>Phyllanthus niruri L.</i>	Gale of the wind	Phyllanthaceae	Herb
137.	<i>Pistia stratiotes L.</i>	Water cabbage	Araceae	Herb
138.	<i>Pithecellobium dulce (Roxb.)Benth.</i>	Madras thorn	Caesalpiniaceae, Fabaceae	Tree
139.	<i>Platycladus orientalis (L.)Franco</i>	Oriental Arbor vitae	Cupressaceae	Tree
140.	<i>Platycladus orientalis(L.) Franco</i>	Arbor vitae orientalis	Cupressaceae	Shrub
141.	<i>Plectranthus scutellarioides</i>	Coleus	Lamiaceae	Shrub
142.	<i>Plumeria alba L.</i>	Caterpillar tree	Apocynaceae	Tree
143.	<i>Plumeria pudica Jacq.</i>	Golden arrow	Apocynaceae	Tree
144.	<i>Polyalthia longifolia</i>	False ashok	Annonaceae	Tree
145.	<i>Polyscias scutellaria(Burm.f) Fosberg</i>	Dinner plate	Araliaceae	Shrub
146.	<i>Portulaca pilosa L.</i>	Hairy pigweed	Portulacaceae	Shrub
147.	<i>Portulaca quadrifidaL.</i>	Chickenweed	Portulacaceae	Shrub
148.	<i>Psidium guajawa L.</i>	Common guava	Myrtaceae	Tree
149.	<i>Ranunculus sceleratus L.</i>	Celery leaf butter cup	Ranunculaceae	Herb
150.	<i>Rhapis excelsa (Thumb.)Henry</i>	Bregu	Arecaceae	Tree
151.	<i>Rhynchosia minima(L.)DC</i>	Burn mouth vine	Leguminosae	Herb
152.	<i>Rhynchosia minima(L.)DC.</i>	Jumby bean	Fabaceae	Herb
153.	<i>Ricinus communis L.</i>	Castor bean	Euphorbiaceae	Tree
154.	<i>Royalstonea regia (Kunth)O.F.Cook</i>	Cuban royal palm	Arecaceae	Tree

155.	<i>Ruellia simplex</i> C.Wright	Mexican bluebell	Acanthaceae	Herb
156.	<i>Saccharum officinarum</i> L.	Saccharum	Poaceae	Herb
157.	<i>Senna alata</i> (L.)Roxb.	Cassia alata	Caesalpinaceae, Fabaceae	Shrub
158.	<i>Senna obtusifolia</i> (L. )	Sickelpod	Caesalpinaceae, Fabaceae	Tree
159.	<i>Senna siamea</i> (Lam. )	Cassia siamea	Caesalpinaceae, Fabaceae	Tree
160.	<i>Senna tora</i> (L. )Roxb	Sickelpod	Caesalpinaceae, Fabaceae	Shrub
161.	<i>Sida acuta</i> Burm.F.	Commonwireweed	Malvaceae	Herb
162.	<i>Sida rhombifolia</i> L.	Arrowleafsida	Malvaceae	Herb
163.	<i>Sisymbrium irio</i> L.	London rocket	Brassicaceae	Herb
164.	<i>Solanum lycopersicum</i> L.	Tomato	Solanaceae	Shrub
165.	<i>Solanum nigrum</i> L.	Black nightshade	Solanaceae	Herb
166.	<i>Sonchus aspera</i> (L. )Hill	Pricklysow thistle	Asteraceae	Herb
167.	<i>Syzygium cumini</i> (L. )Skeels	Jamun	Myrtaceae	Tree
168.	<i>Taraxacum officinale</i> (L.)weber F.H.Wigg	Blowball	Asteraceae	Herb
169.	<i>Tagetes</i>	Marigold	Asteraceae	Herb
170.	<i>Tecoma stans</i> (L.) Juss. Ex Kunth	Yellow bells	Bignoniaceae	Shrub
171.	<i>Tephrosia purpurea</i> (L.) Pers.	Sharpunkha	Fabaceae	Shrub
172.	<i>Thevetia peruviana</i> (L.) Lippold	Yellow oleander	Apocynaceae	Shrub
173.	<i>Thuja occidentalis</i> L.	White cedar	Pinopsida	Gymnosperm
174.	<i>Tinospora cordifolia</i> (Thunb)Miers	Giloy	Menispermaceae	Climber
175.	<i>Tradescantia spathaceae</i> Sw.	Oyster plant	Commelinaceae	Herb
176.	<i>Trianthema portulacastrum</i> L.	Black pigweed	Aizoaceae	Herb
177.	<i>Tribulus terrestris</i> (Linn)	Gokhru	Zygophyllaceae	Herb
178.	<i>Tridax procumbens</i> L.	Coat buttons	Asteraceae	Herb
179.	<i>Typha</i>		Poaceae	Herb
180.	<i>Urginea indica</i> (Roxb)Kunth	Sea onion	Liliaceae	Herb
181.	<i>Withania somnifera</i> (L.)Dunal	Aswagandha	Solanaceae	Shrub
182.	<i>Xanthium strumarium</i> L.	Cocklebur	Asteraceae	Shrub
183.	<i>Zizyphus mauritiana</i> Lam.	Indian jujube	Rhamnaceae	Tree
184.	<i>Zyphyranthes alamanda</i> (L.) Herb	Rainlily	Amaryllidaceae	Herb

### 3. RESULTS AND DISCUSSION

A total of 184 plant species were observed. Some pteridophytes and bryophytes were also observed but they are not listed. One species of Gymnosperm was seen in Campus. Of the total plant species observed, based on the habit, 74 (40.21%) were represented by herbs, 62 (33.69%) by shrubs, 42 (22.82%) by trees and only 4 (2.17%) by climbers following 1 (0.54%) by creeper and 1 (0.54%) by vine. Of the total flora recorded, the maximum number of the species, that is 25(13.58%) belongs to Fabaceae family followed by 12 (6.52%) to Poaceae family whereas 10 (5.43%) species were represented by Amaranthaceae family.

### 4. CONCLUSION

Plants support all forms of life by providing them unique environment. The favorable climatic conditions have contributed to high taxonomic diversity of university campus. (Cardinale2006,2007,Stachowicz2007,Schmid2009,Srivastav2009). Only bold and imaginative action in conservation will enable us to save this rich heritage (Cardinale2007,2009,Quijas2010,Cadotte2008,loreau2010)

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