

FLORAL DIVERSITY OF JHALANA FOREST AREA OF JAIPUR DISTRICT, RAJASTHAN

Deepika Gunpal¹, Shikha Gupta¹, Gajraj Singh Verma², Jai Singh¹ and Amit Kotia^{1*}

¹Department of Botany,

²Department of Zoology,

University of Rajasthan, Jaipur-302004

*Corresponding Author: Amit Kotia, email ID: research4taxonomy@gmail.com

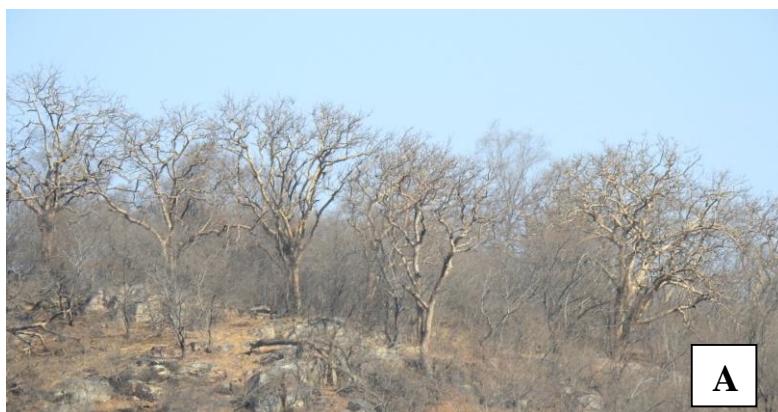
The Jhalana Forest area comes under the Jaipur administration block of the Rajasthan Forest Department. According to the biogeographical categorization, India is divided into 12 different biogeographical zones. Among these the Jaipur forest area comes under the Semi-arid region. Jaipur forms the transition zone between the Indian Desert and the Semi-arid zone. On one side of the Jaipur District is present Sikar, which is desert and on the other side is Alwar-Bharatpur District area which represents the semi-arid region. So, this transition zone is representing a complex or mixture of vegetation from both Arid (desert) and Semi-arid habitat. The Semi-arid part is mainly composed of Savanna land.

The Jhalana forest, according to the habitat can be categorized into the following types:

ARAWALI SERIES :

The Arawali hillock is dominated by *Anogeissus pendula* Edgew. The Dhonk tree covers all most all parts of the hills. *Sterculia urens* Roxb., *Lannea coromandelica* (Houtt.) Merril. and *Wrightia tinctoria* are commonly associated with *Anogeissus pendula* but their numbers are very low and they occur only as one or two trees in scattered form. The top or edges of the hillock are generally covered by *Boswellia serrata* Roxb. in association with *Anogeissus pendula*. The species growing mostly in the foot hills are *Butea monosperma* (Lamk.) Taub. and *Acacia leucophloea* (Roxb.) Willd. The other associates

are *Bauhinia racemosa* Lamk.; *Diospyros montana* Roxb. and *Dichrostachys cineraria*. The Under story of this habitat is formed by *Rhus mysurensis* Heyne., *Securinaga pauciflorum* Stocks., *Commiphara wightii* (Arn.) Bhandari., *Grewia flavescentia* Juss. and *Grewia tenax* (Forsk.) Fiori. *Blainvillea acmella* (Linn.) Philipson. and *Hibiscus ovalifolius* Vahl. Weeds like *Lantana indica* Roxb. are also seen growing. The common lianas of the habitat are *Cocculus pendulus* (Forst.) Diels., *Pergularia daemia* (Forsk.) Chiov. and *Ipomea* species. The common grasses of this habitat are *Aristida* spp., *Brachiaria* spp., *Cenchrus* spp., *Chloris* spp., *Eragrostis* spp., *Heteropogon* spp. and *Sporobolus* spp.



A

Figure A: Showing the edges of hillocks with the *Boswellia serrata* Roxb. in association with *Anogeissus pendula* Edgew.

RAVINES :

Another habitat of Jhalana forest area is ravines which cover some part of this landscape. These undulating sandy slopes have fixed soil. The dominant species in this habitat is *Acacia senegal* but the area near by these ravines is occupied by *Prosopis juliflora* (Swartz.) DC. and *Acacia tortilist* tree species. These species get adapted to the habitat and take over the area of *Acacia senegal* and become dominant. The other

associated plants like *Acacia leucophloea*, *Prosopis cineraria*, *Dichrostachys cinerea* (Linn.) Wight. et Arn., *Maytenus emarginata* (Willd.) Ding-Hou., *Tecomella undulata* (Sm.) Seem. and *Balanites aegyptiaca* (Linn.) Delile. are rarely found or are found in low number. The understory is covered with species of *Ziziphus nummularia* (Burm.f.) Wt. et Arn., *Tephrosia purpurea* (Linn.) Pers.



Figure B: Showing the ravines vegetation with *Acacia tortilist* and *Acacia Senegal* tree

Acacia senegal FORMATION :

This habitat is typically an open overwood of *Acacia senegal* with few other associates and few other undergrowth. Main species are of xerophytic type on deposit soil. *Acacia leucophloea*, *Prosopis cineraria* (L.) Druce., *Dichrostachys cinerea* (Linn.) Wight. et Arn., plants are naturally growing species for this habitat but *Acacia leucophloea* occurs in a very poor number whereas *Prosopis cineraria* and *Maytenus emarginata* (Willd.) Ding-Hou. can be seen easily. *Acacia tortilist* is not naturally occurring species of this habitat. It is an introduced species but now it is well adapted to the habitat and is occupying the area of *Acacia senegal*.

The understory covered with thorny bushes species like *Ziziphus nummularia* (Burm.f.) Wt. et Arn., *Capparis deciduas*, *Capparis sepiaria*, *Sericostoma pauciflorum*, *Aerva tomentosa*. The lianas of this habitat are *Cocculus pendulus* (Forst.) Diels., *Maerua oblongifolia*, *Pergularia daemia*, and *Ipomea* sp. herbs e.g., *Argemone mexicana*, *Tephrosia purpurea* (Linn.) Pers., *Cleome viscosa*, *Tribulus terrestris*, *Ipomoea* sp., *Pedalium murex*, *Sesamum mulayanum*, *Lepidagathis* sp., *Boerhavia diffusa*, and grasses like *Chloris* spp., *Aristida* spp., *Eragrostis* spp., *Brachiaria* spp., *Cenchrus* spp., *Dichanthium* spp. and *Sporobolus* spp. etc.



Figure C: Showing the association of *Acacia senegal*

EUPHORBIA SCRUB:

Some part of the Jhalana forest is covered with thorny *Euphorbia caducifolia* plant. As this patch is dominated by *Euphorbia caducifolia*, the associated species with thorns are *Rhynchosia minima*, *Grewia tenax*, *Barleria* species, *Indigofera cordifolia*. The grass species in this habitat are *Aristida* spp., *Eleusine* spp., *Dactyloctenium* spp., *Dichanthium* spp. and *Cenchrus* spp.

PLANTATION OF ACACIA TORTILIS (FORSK.) HAYNE :

Some part of the Jhalana forest is planted with *Acacia tortilis* (Forsk.) Hayne. This tree is spread over a large area. But due to plantation most of the trees are of the same age group. Now this species is well adapted in that area and new saplings with different age group of *Acacia tortilis* (Forsk.)

Hayne. is also seen in this patch. The other plants species that can be seen in association are *Acacia senegal* and *Prosopis juliflora* (Swartz.) DC. The under story species are *Capparis deciduas*, *Capparis sepiaria* *Aerva tomentosa* (Burm. f.) Juss., *Hibiscus ovalifolius* Vahl., *Leptadenia pyrotechnica* (Forsk.) Decne., *Verbesina encelioides* (Cav.) Benth. & Hook., *Xanthium strumarium* Linn., *Ziziphus nummularia* (Burm.f.) Wt.et Arn., *Achyranthes aspera* Linn., *Boerhavia diffusa* Linn., *Pupalia lappacea* (Linn.) Juss., *Tephrosia purpurea* (Linn.) Pers., *Argemone mexicana* Linn., *Heliotropium* spp., *Cleome viscosa* Linn., *Peristrophe bicalyculata* (Retz.) Nees. and *Sesamum* sp. etc.



Figure D: Showing the plantation of *Acacia tortilis* (Forsk.) Hayne.

PLANTATION OF *Prosopis juliflora* (Swartz.) DC.:

Prosopis juliflora (Swartz.) DC. covers a large area of the Jhalana forest with fast regeneration. As this plant is invasive for Rajasthan or India, it does not support the growth of other naturally occurring plants.

Very few plants are seen growing under its cover like *Xanthium strumarium* Linn. *Argemone mexicana* Linn. *Verbesina encelioides* (Cav.) Benth. & Hook.

Table1 : Checklist of Flowering Plants of Jhalana Hill Forest area of Jaipur District

S. No.	Plant Species	Local Name	Family
1	<i>Abrus precatorius</i> Linn.	Chirami/Chanboi	Fabaceae
2	<i>Abutilon indicum</i> (Linn.) Sweet.	Kanghi	Malvaceae
3	<i>Acacia leucophloea</i> (Roxb.) Willd.	Babool/Boliya	Mimosaceae
4	<i>Acacia nilotica</i> (Linn.) Del.	Babool	Mimosaceae
5	<i>Acacia raddiana</i> Savi.	Bamoor	Mimosaceae
6	<i>Acacia senegal</i> (Linn.) Willd.	Koomata	Mimosaceae
7	<i>Acalypha indica</i> Linn.	Kuppi/Kholi	Euphorbiaceae
8	<i>Acanthospermum hispidum</i> DC.	-----	Asteraceae
9	<i>Achyranthes aspera</i> Linn.	Adilio kato	Amaranthaceae
10	<i>Acrachne recemosa</i> (Heyne ex Roem & Schult.) Ohwi	Ghass	Poaceae
11	<i>Actiniopteris radiata</i> (J. Koenig ex Sw.) Link.	Morpagi	Actinopteridaceae
12	<i>Adansonia digitata</i> Linn.	Kalp-Varksha	Bombacaceae
13	<i>Adhatoda zeylanica</i> Medic.	Adusa	Acanthaceae
14	<i>Aegle marmelos</i> (Linn.) Corr.	Bel/Beel	Rutaceae
15	<i>Aerva javanica</i> (Burm.f.) Juss.ex Schult.	Bui	Amaranthaceae
16	<i>Ageratum conyzoides</i> Linn.	-----	Asteraceae
17	<i>Ailanthus excelsa</i> Roxb.	Ardu/Aldoo	Simaroubaceae
18	<i>Albizia lebbeck</i> (Linn.) Benth.	Siris	Mimosaceae
19	<i>Alternanthera pungens</i> Kunth.	Santhi	Amaranthaceae
20	<i>Alysicarpus vaginalis</i> (Linn.) DC.	Cholai	Fabaceae
21	<i>Amaranthus spinosus</i> Linn.	Kantili chaulai	Amaranthaceae
22	<i>Amaranthus viridis</i> Linn.	Jangli cholai	Amaranthaceae
23	<i>Ammannia baccifera</i> Linn.	Jal bhangra	Lythraceae
24	<i>Ampelocissus latifolia</i> (Roxb.) Planch	Jangali angur	Vitaceae
25	<i>Anagallis arvensis</i> Linn.	-----	Anagallaceae
26	<i>Anisomeles indica</i> (Linn.) O.Kuntze	Bhainsa pata	Lamiaceae
27	<i>Annona squamosa</i> Linn.	Sitaphal	Annonaceae
28	<i>Anogeissus pendula</i> Edgew.	Dhauk/dhok	Combretaceae
29	<i>Apluda mutica</i> Linn.	Bhongta/poleda	Poaceae
30	<i>Argemone mexicana</i> Linn.	Satyanashi	Papaveraceae
31	<i>Aristida funiculata</i> Trin. & Rupr.	Lamp	Poaceae
32	<i>Artemisia scoparia</i> Waldst et Kit.	-----	Asteraceae
33	<i>Asparagus racemosus</i> Willd.	Satabar/Sitabar	Lilaceae
34	<i>Asphodelus tenuifolius</i> Cav.	Pyaji	Liliaceae

35	<i>Atyloshia scarabaeoides</i> (L.) Benth.	-----	Fabaceae
36	<i>Azadirachta indica</i> A. Juss.	Neemdo/Neem	Meliaceae
37	<i>Bacopa monnieri</i> (Linn.) Wettest.	Brahmi	Scrophulariaceae
38	<i>Balanites aegyptiaca</i> (Linn.) Del.	Hingota	Simaroubaceae
39	<i>Barleria prionitis</i> Linn.	Piya bansoda	Acanthaceae
40	<i>Bauhinia racemosa</i> Lam.	Sainto, Santa	Caesalpiniaceae
41	<i>Bauhinia variegata</i> Linn./ <i>Bauhinia purpurea</i> Linn.	Kachnar	Caesalpiniaceae
42	<i>Bidens biternata</i> (Lour.) Merr .& Sherff ex Sherff	Chitakni	Asteraceae
43	<i>Blainvillea acmella</i> (Linn.) Philipson.	-----	Asteraceae
44	<i>Blastania fimbristipula</i> (Fenzl.) Kotschy et Asteraceae Peyr.	-----	Cucurbitaceae
45	<i>Boerhavia diffusa</i> Linn.	Santhi	Nyctaginaceae
46	<i>Bombex ceiba</i> Linn.	Semal/Sanwal	Bombacaceae
47	<i>Borreria articulatis</i> (Linn.) F.N. Will.	-----	Rutaceae
48	<i>Boswellia serrata</i> Roxb. ex Cocl.	Salar	Burseraceae
49	<i>Bothriochloa pertusa</i> (Linn.) A.Camus	Ghass	Poaceae
50	<i>Brachiaria ramosa</i> (Linn.) Stapf.	Kuri Korachinki	Poaceae
51	<i>Bulbostylis barbata</i> (Rottb.) Clarke	Chuhe ki Mooth	Cyperaceae
52	<i>Butea monosperma</i> (Lam.) Taub.	Chheela/Dhak	Fabaceae
53	<i>Calotropis procera</i> acut. non (Ait.) Ait. f.	Aakdo/Aak	Asclepiadaceae
54	<i>Capparis decidua</i> (Forsk.) Edgew.	Kair/Tainti	Capparaceae
55	<i>Capparis sepiaria</i> Linn.	Karil/ Kair/Tainti	Capparaceae
56	<i>Cardiospermum halicacabum</i> Linn.	Kanphuti	Sapindaceae
57	<i>Cassia fistula</i> Linn.	Amaltas	Caesalpiniaceae
58	<i>Cassia occidentalis</i> Linn.	Ratua/Kasondi	Caesalpiniaceae
59	<i>Cassia siamea</i> Lam.	Syama	Caesalpiniaceae
60	<i>Cassia tora</i> Linn.	Pamad	Caesalpiniaceae
61	<i>Cayratia trifolia</i> (Linn.) Domin	Rachani	Vitaceae
62	<i>Celastrus paniculata</i> Willd.	Malkangni	Celastraceae
63	<i>Celosia argentea</i> Linn.	Surela/lambi	Amaranthaceae
64	<i>Cenchrus biflorus</i> acut. non Roxb.	Bharoot	Poaceae
65	<i>Cenchrus ciliaris</i> Linn.	Dhaman	Poaceac
66	<i>Chenopodium murale</i> Linn.	Chieva	Chenopodiaceae
67	<i>Chloris virgata</i> Sw.	Chhoto eranio	Poaceae
68	<i>Cissampelos pareira</i> auct. non Linn.	Kalipar	Menispermaceae
69	<i>Citrullus colocynthis</i> (Linn.) Schrad.	-----	Cucurbitaceae
70	<i>Cleome gynandra</i> Linn.	Hulhul	Cleomaceae

71	<i>Cleome viscosa</i> Linn.	Pili-hulhul	Cleomaceae
72	<i>Clerodendrum phlomidies</i> Linn. f.	Arani	Verbenaceae
73	<i>Coccinia grandis</i> (Linn.) J.O.Voigt	Jangli Parwal	Cucurbitaceae
74	<i>Cocculus hirsutus</i> (Linn.) Diels.	Bajarbel	Menispermaceae
75	<i>Cocculus pendulus</i> (J.R. & G. Forst.) Diels.	Bajarbel	Menispermaceae
76	<i>Commelina benghalensis</i> Linn.	Kana gokna	Commelinaceae
77	<i>Commelina forskalaei</i> Vahl.	-----	Commelinaceae
78	<i>Commiphora wightii</i> (Arn.) Bhandari	Gugar/Guggal	Burseraceae
79	<i>Convolvulus microphyllus</i> Sieb. ex Spreng.	Sankahuli	Convolvulaceae
80	<i>Corchorus aestuans</i> Linn.	Jute	Tiliaceae
81	<i>Corchorus depressus</i> (Linn.) Stocks.	Bauphali	Tiliaceae
82	<i>Corchorus tridens</i> Linn.	Kaua ki chonch	Tiliaceae
83	<i>Cordia dichotoma</i> Forst. f.	Lisora/Lehsua	Ehretiaceae
84	<i>Cordia gharaf</i> (Forsk.). Ehr. ex Asch.	Goondee	Ehretiaceae
85	<i>Crotalaria burhia</i> Buch. Ham. ex Benth.	Jhunda/Lagrya	Fabaceae
86	<i>Crotalaria medicaginea</i> Lam.	Jhojhru	Fabaceae
87	<i>Croton bonplandianum</i> Baill.	-----	Euphorbiaceae
88	<i>Cucumis callosus</i> (Rott.) Cogn.	Kachra/Kachari	Cucurbitaceae
89	<i>Cuscuta reflexa</i> Roxb.	Amarbel	Cuscutaceae
90	<i>Cynodon dactylon</i> (Linn.) Pers.	Daubri/Doob	Poaceae
91	<i>Cyperus bulbosus</i> Vahl/ <i>Cyperus rotundus</i> Linn.	Motha	Cyperaceae
92	<i>Cyperus triceps</i> (Rottb.) Endl.	-----	Cyperaceae
93	<i>Dactyloctenium aegyptium</i> (Linn.) Willd.	Makra grass	Poaceae
94	<i>Dalbergia sissoo</i> Roxb.	Tali/Seesham	Fabaceae
95	<i>Datura innoxia</i> Mill.	Dhatureo	Solanaceae
96	<i>Desmostachya bipinnata</i> Linn. Stapf	Dab/Kush	Poaceae
97	<i>Dichanthium annulatum</i> (Forsk.) Stapf	Makad gass	Poaceae
98	<i>Dichrostachys cinerea</i> (Linn.) Wt. & Arn.	Birbira/kolai	Mimosaceae
99	<i>Digera muricata</i> (Linn.) Mart.	Lesua	Amaranthaceae
100	<i>Digitaria pennata</i> (Hochst.) T.Cooke	Ghass	Poaceae
101	<i>Diospyros montana</i> Roxb.	Bistendu	Ebenaceae
102	<i>Dyerophytum indicum</i>	-----	Plumbaginaceae
103	<i>Echinochloa colona</i> (Linn.) Link	Sama/Swank	Poaceae
104	<i>Echinops echinatus</i> Roxb.	Oont-katela	Asteraceae
105	<i>Eclipta alba</i> (Linn.) Hassk.	Kala Bhangra	Asteraceae
106	<i>Ehretia laevis</i> Roxb.	Tambolan	Ehretiaceae
107	<i>Emilia sonchifolia</i> (Linn.) DC.	Sahdei	Asteraceae

108	<i>Eragrostis ciliaris</i> (Linn.) R.Br.	Siteo/Jhura	Poaceae
109	<i>Eragrostis pilosa</i> (Linn.) P. Beauv.	-----	Poaceae
110	<i>Eragrostis tremula</i> Hochst. ex Steud.	-----	Poaceae
111	<i>Eucalyptus alba</i> Reinw.	Safeda	Myrtaceae
112	<i>Euphorbia caducifolia</i> Haines	Dudhi	Euphorbiaceae
113	<i>Euphorbia hirta</i> Linn.	Dudhi	Euphorbiaceae
114	<i>Euphorbia prostrata</i> Ait.	-----	Euphorbiaceae
115	<i>Euphorbia thymifolia</i> Linn.	Doodhi	Euphorbiaceae
116	<i>Evolvulus alsinoides</i> Linn.	Shankhpushpi	Convolvulaceae
117	<i>Farsetia hamiltonii</i> Royle.	-----	Brassicaceae
118	<i>Ficus benghalensis</i> Linn.	Bad/Badla	Moraceae
119	<i>Ficus racemosa</i> Linn.	Gular	Moraceae
120	<i>Ficus religiosa</i> Linn.	Pipali/Pipal	Moraceae
121	<i>Fumaria indica</i> (Haussk.) Pugsley.	-----	Fumariaceae
122	<i>Gisekia pharanceoides</i> Linn.	Sureli	Molluginaceae
123	<i>Gnaphalium indicum</i> Linn.	-----	Asteraceae
124	<i>Gomphrena celosioides</i> Mart.	-----	Amaranthaceae
125	<i>Grewia flavescentia</i> A. Juss.	Jadhkher	Tiliaceae
126	<i>Grewia hirsuta</i> Vahl	Chabeni	Tiliaceae
127	<i>Grewia tenax</i> (Forsk.) Fiori	Gangeran	Tiliaceae
128	<i>Gymnema sylvestre</i> (Retz.) R. Br.ex Schult.	Gudmar	Asclepiadaceae
129	<i>Heliotropium indicum</i> Linn.	Hathsura	Boraginaceae
130	<i>Heliotropium marifolium</i> Retz.	Hoth rachani	Boraginaceae
131	<i>Heliotropium strigosum</i> Willd	Hoth rachani	Boraginaceae
132	<i>Heteropogon contortus</i> (Linn.)	Lapda Ghas	Poaceae
133	<i>Hibiscus ovalifolius</i> Vahl.	-----	Malvaceae
134	<i>Holoptelea integrifolia</i> (Roxb.) Planch.	Bander ki Roti	Ulmaceae
135	<i>Indigofera cordifolia</i> Heyne ex Roth	Bekar	Fabaceae
136	<i>Indigofera linifolia</i> (L.f.) Retz.	Jhunjhani ghas	Fabaceae
137	<i>Indigofera linnaei</i> Ali.	-----	Fabaceae
138	<i>Indigofera sessiliflora</i> DC.	-----	Fabaceae
139	<i>Ipomea pentaphylla</i>	-----	Convolvulaceae
140	<i>Ipomoea carnea</i> Jacq.	Besharm	Convolvulaceae
141	<i>Ipomoea eriocarpa</i> R.Br.	-----	Convolvulaceae
142	<i>Ipomoea pes-tigridis</i> Linn.	Dabg dahela	Convolvulaceae
143	<i>Lannea coromandelica</i> (Houtt.) Merr.	Gurjen	Anacardiaceae
144	<i>Lantana camara</i> Linn.	Jhermari	Verbenaceae

145	<i>Launaea procumbens</i> (Roxb.) Ramayya & Raja gopal	Jungli ghobi	Asteraceae
146	<i>Lepidagathis crispam</i>	-----	Acanthaceae
147	<i>Lepidagathis trinervis</i>	-----	Acanthaceae
148	<i>Leptadenia pyrotechnica</i> (Forsk.) Decne.	Khimp/Khimpadi	Asclepiadaceae
149	<i>Leucas aspera</i> (Willd.) Spreng.		Lamiaceae
150	<i>Lindenbergia indica</i> (Linn.) Vatke	-----	Scrophulariaceae
151	<i>Maerua oblongifolia</i>	-----	Capparaceae
152	<i>Martynia annua</i> Linn.	Bag-Nakhi	Martyniaceae
153	<i>Maytenus emarginatus</i> (Willd.) Ding Hou	-----	Celastraceae
154	<i>Medicago sativa</i> Linn.	Rizka	Fabaceae
155	<i>Melilotus alba</i> Medix. ex Desr.	Jangli methi	Fabaceae
156	<i>Mollugo cerviana</i> (Linn.) Ser.	Chiddi ka Bajara	Molluginaceae
157	<i>Mukia maderaspatana</i> (Linn.) M. Roem.	-----	Cucurbitaceae
158	<i>Musa paradisiaca</i> Linn.	Kela/Kell	Musaceae
159	<i>Narangi cranulata</i>	Noptya	Rutaceae
160	<i>Nerium indicum</i> Mill.	Kaner	Apocynaceae
161	<i>Nyctanthes arbor-tristis</i> Linn.	Harsingar	Nyctanthaceae
162	<i>Ocimum canum</i> Sims.	Jangli tulsi	Lamiaceae
163	<i>Oligochaeta ramosa</i> (R xb.) Wagenitz.	-----	Asteraceae
164	<i>Panicum</i> sp.	Grass	Poaceae
165	<i>Pedalium murex</i> Linn.	Gokhroo	Pedaliaceae
166	<i>Pergularia daemia</i>	-----	Asclepiadaceae
167	<i>Peristrophe bicalyculata</i> (Retz.) Nees.	-----	Acanthaceae
168	<i>Perotis indica</i> (Linn.) O. Ktze.	Lampali	Poaceae
169	<i>Phyllanthus emblica</i> Linn.	Anwla	Euphorbiaceae
170	<i>Physalis minima</i> Linn.	Charpoti	Solanaceae
171	<i>Pithecellobium dulce</i> (Roxb.) Benth.	Jungle jalebi	Mimmosaceae
172	<i>Plumbago zeylanica</i> Linn.	Chitrak	Plumbaginaceae
173	<i>Polycarpaea corymbosa</i> (Linn.) Lamk.	-----	Caryophyllaceae
174	<i>Polygala erioptera</i> DC.	-----	Polygalaceae
175	<i>Portulaca oleracea</i> Linn.	Kulfa	Portutacaceae
176	<i>Portulaca suffruticosa</i> Thw.	-----	Portutacaceae
177	<i>Prosopis cineraria</i> (Linn.) Druce.	Khejari/Jati	Mimosaceae
178	<i>Prosopis juliflora</i> (Swartz.) DC.	Vilayati Kikar	Mimosaceae
179	<i>Pulicaria angustifolia</i> DC.	-----	Asteraceae
180	<i>Pulicaria crispa</i> Sch.-Bip.	-----	Asteraceae
181	<i>Pupalia lappacea</i> (Linn.) Juss.	-----	Amaranthaceae

182	<i>Rhus mysurensis</i> G. Don	Dansaro	Anacardiaceae
183	<i>Rhyncosia minima</i>	-----	Fabaceae
184	<i>Rostellularia procumbens</i> (Linn.) Ness.	-----	Acanthaceae
185	<i>Saccharum bengalense</i> Retz.	Munj	Poaceae
186	<i>Securinga pauciflorum</i> Stocks.	-----	Euphorbiaceae
187	<i>Sericostoma pauciflorum</i> Stocks.	-----	Boraginaceae
188	<i>Sesamum mulayanum</i> Nair.	Jangli-Til	Pedaliaceae
189	<i>Setaria italica</i> Linn.	Kakun	Poaceae
190	<i>Setaria verticillata</i> (Linn.) P. Beau.	Chruchida	Poaceae
191	<i>Sida veronicifolia</i> Lam.	Kharanti	Malvaceae
192	<i>Sisymbrium irio</i> Linn.	-----	Brassicaceae
193	<i>Solanum nigrum</i> Linn.	Kali chirpoti	Solanaceae
194	<i>Solanum surattense</i> Burm. f.	Gulari	Solanaceae
195	<i>Sonchus oleraceus</i> Linn.	Ankhali	Asteraceae
196	<i>Sporobolus diander</i> (Retz.) P. Beauv.	Ghass	Poaceae
197	<i>Sterculia urens</i> Roxb.	Kadaya/Karah	Sterculiaceae
198	<i>Syzygium cumini</i> (Linn. Skeels.	Jamun	Myrtaceae
199	<i>Syzygium heyneanum</i> (uthie) Wall. ex Gamble	Kath Jamun	Myrtaceae
200	<i>Tamarix aphylla</i> (Linn.) Karst.	Farash	Tamaricaceae
201	<i>Tecomella undulata</i> (S..) Seem.	Rohida/Rohido	Bignoniaceae
202	<i>Tephrosia purpurea</i> (Linn.) Pers	Jhojhru	Fabaceae
203	<i>Tephrosia strigosa</i> (Dalz.) Sant.	-----	Fabaceae
204	<i>Terminalia arjuna</i> (Roxb. ex DC.) W.& A.	Arjun	Combretaceae
205	<i>Terminalia bellirica</i> (Gaertn.) Roxb.	Baheda	Combretaceae
206	<i>Tinospora cordifolia</i> (Willd.) Miers.	Neem Giloy	Menispermaceae
207	<i>Trianthema portulacastrum</i> Linn.	Santa	Aizoaceae
208	<i>Tribulus terrestris</i> Linn.	Gokhroo	Zygophyllaceae
209	<i>Tridax procumbens</i> Linn.	Rookhari	Asteraceae
210	<i>Trigonella polycerata</i> Linn.	jangali methi	Fabaceae
211	<i>Verbesina encelioides</i> (Cav.) Benth. & Hook.	-----	Asteraceae
212	<i>Vernonia cinerea</i> (Linn.) Less.	Sahadevi	Asteraceae
213	<i>Waltheria indica</i> Linn.	-----	Sterculiaceae
214	<i>Withania somnifera</i> (Linn.) Dunal.	Asgandha	Solanaceae
215	<i>Wrightia tinctoria</i> (Roxb.) R.Br.	Khirni/Hirani	Apocynaceae
216	<i>Xanthium strumarium</i> Linn.	Adhasisi	Asteraceae
217	<i>Zaleya govindia</i> (Buch-Ham. ex G. Don) N.C. Nair.	satto	Portulacaceae
218	<i>Ziziphus mauritiana</i> Lam.	Premli Bor	Rhamnaceae

219	<i>Ziziphus nummularia</i> (Brum.f.) Wight & Arn.	Jhar Beri	Rhamnaceae
220	<i>Zizyphus xylopyrus</i> (Retz.) Willd.	Ghat Bor	Rhamnaceae

REFERENCES :

1. Adams, A. 1899. *The Western Rajputana State: A medico-topographical and general account to Marwar, Sirohi and Jaisalmer.* London.
2. Bhandari, M.M. 1978. *Flora of the Indian Desert.* Scientific Publisher's, Jodhpur.
3. Meena, K. L. and Yadav, B. L. 2011. *Flora of South-Central Rajasthan,* Scientific Publisher's, Jodhpur, Raj.
4. Reddy, C.S, Krishna, P.H. and Kiran, A. R. 2011. *Mapping the Vegetation Types of Rajasthan, India Using Remote Sensing Data Journal of Environmental Research and Management Vol. 2(1).* pp. 001-009.
5. Roy, S. and A. Kumar. 1995. *Biodiversity of Rajasthan and its energy potentials.* J. Env. Poll. 2: 105-109.
6. Sharma, S. and Tiagi, B. 1979. *Flora of North –East Rajasthan.* Kalyani Publishers, New Delhi.
7. Shetty, B.V. and Singh, V. 1987. *Flora of Rajasthan Vol. I.* Botanical Survey of India. Calcutta.
8. Shetty, B.V. and Singh, V. 1991. *Flora of Rajasthan Vol. II.* Botanical Survey of India. Calcutta.
9. Shetty, B.V. and Singh, V. 1993. *Flora of Rajasthan Vol. III.* Botanical Survey of India. Calcutta.
10. Shetty, B.V. and Singh. V. (Edits.) 1993. *Flora of Rajasthan. Vol. III.* Botanical Survey of India. Calcutta.

I





GLOBAL JOURNAL OF MULTIDISCIPLINARY STUDIES

Volume 8, Issue 6, May 2019

ISSN : 2348-0459

Available online at www.gjms.edwin.co.in
IF: 5.323, UGC Approved



GLOBAL JOURNAL OF MULTIDISCIPLINARY STUDIES

Volume 8, Issue 6, May 2019

ISSN : 2348-0459

Available online at www.gjms.edwin.co.in
IF: 5.323, UGC Approved