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## **ASSESSMENT OF FLORAL DIVERSITY AROUND A HISTORICAL LAKE SWATANTRAPUR, SANGLI (MAHARASHTRA, INDIA)**

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### **ABSTRACT**

Present paper focus on the phytosociological survey carried out in Swatantrapur lake and surrounding area. The study enlists the plant species with their taxonomic information, status and their economic values. The study area showed three important vegetation types viz. semi-evergreen, moist deciduous and dry deciduous. Our survey encountered 116 Herbs, 36 trees, 15 shrubs, 14 climbers and 1 parasitic herb from the analysis of 192 taxa. It provides a baseline data for further studies of this socioeconomically and geographically hardened region especially in utilization of natural resources in sustainable ways. The Theory of Tolerance (Good, 1931) was proposed to express range of tolerance in plants and their distribution. According to this theory, family Fabaceae, Asteraceae and Caesalpiniaceae are tolerant and dominant families in the present study region.

**Keywords:** *Atpadi, Medicinal Plants, RET, Floristic*

### **INTRODUCTION**

Sangli is a historically important district situated in the Southern part of Maharashtra. It is situated between the latitudes 16°45' N and 17°33' N and longitudinal of 73°41' East and 75°41' East. The most part of the district is drought prone and has insignificant irrigation facilities. Climatically the region falls under the rain shadow region of Sahyadri Mountain. Temperature increases from west to east and rainfall decreases from west to east. Climatically, the region shows four seasons, namely monsoon, post-monsoon, cold season and hot season. The region is drained by river Krishna and its tributaries as Yerala and Agrani. The district is bounded by Satara district on North and bordered by Belgaum and Bijapur Districts of Karnataka on South. It is bordered by Kolhapur on East while Ratnagiri lies at West. The district has five administrative regions and ten tehsils. Geologically Sangli district represents deccan traps with Basalt as main type of rock. The river valleys have black fertile soil which is formed from deccan traps. These rivers are also the large source of sand for construction.

The district represents two main hill ranges viz. Sahyadri ranges and the spur of Mahadev ranges. The Machhindragad – Kamal Bhairav hill range extend in North West–southeast direction. This range is offshoot of Mahadev range, which runs along the borders of Tasgaon and Khanapur tahsils. An offshoot of this range in the form of Aundh hills in Satara district separates the catchments of river Krishna and river Yerala. The main range continues further south-eastward and separates the Man River.

Atpadi is an administrative town in Sangli district situated north-east of Sangli. Earlier it was a part of Bijapur district in Adilshahi and later becomes a part of princely state of Aundh. After independence it was the part of Satara district until the formation of new district 'Sangli'. The present study region 'Swatantrapur' is situated 6 km away from Atpadi town. Swatantrapur is historically well known and famous place in Sangli district. It was founded in 1939 by Pant Pratinidhi, rulers of then princely state of Aundh. A Polish engineer was appointed by him to tackle the drought by construction of a large lake. The work of digging was done by the prisoners who had been sentenced to death. So that the prisoners could continue the work, an open jail called Swatantrapur Khuli Vasahat was built here. This jail still exists, and some convicted murderers are still kept here.

From biodiversity constrains Sangli district has been neglected probably because of its geographical and climatic conditions. The floristic analysis of woody species from Chandoli National Park documented 120

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species (Kanade *et al.*, 2008). Salunkhe (2015) has reported 209 species of flowering plants from Sagareshwar sanctuary exhibited by thorny dry deciduous type of forest. The diversity of angiospermic plants of Shukacharya hills was studied and 240 species were reported (Sathe *et al.*, 2008).

Wetlands are the specialized habitats harboring unique flora and fauna. These habitats support maximum biodiversity and ultimately contribute in ecological balance. Aquatic biodiversity has enormous aesthetic and economic value and is largely responsible for maintaining and supporting overall environmental health. The present work is undertaken to document unique floral diversity of this region. There is need for the extensive field study of this eco-geographically stressed region. Some localities from Atpadi tehsils are prioritized for conservation under the survey of potential ecologically sensitive areas in the Northern Western Ghats (Gadgil, 2010). Hence the present work will be of great help for identification of prioritized species for conservation in future.

### MATERIALS AND METHODS

The plant specimens were collected and processed for the herbarium following the technique of Jain & Rao (1977) and flowers were preserved in 70% alcohol. The list of the plants is prepared based on repeated seasonal observations of the study region either in the flowering or fruiting stage. The specimens collected were identified by consultation of literature (Cooke, 1901-1908; Yadav & Sardesai, 2002; Singh et al 2001). Then search of relevant literature for determining correct names of taxa was followed (IPNI, Tropicos, The Plant List). In the enumeration of taxa the alphabetical arrangement of families is followed for the sake of convenience.

### RESULTS AND DISCUSSION

The present study deals with the documentation of the total floral diversity of the historical lake at Swatantrapur, Atpadi. Though Atpadi is drought prone region the Swatantrapur lake has very rich floral diversity during different seasons of the year. During the present floristic studies large number of flowering plants belonging to various Angiospermic families were recorded.

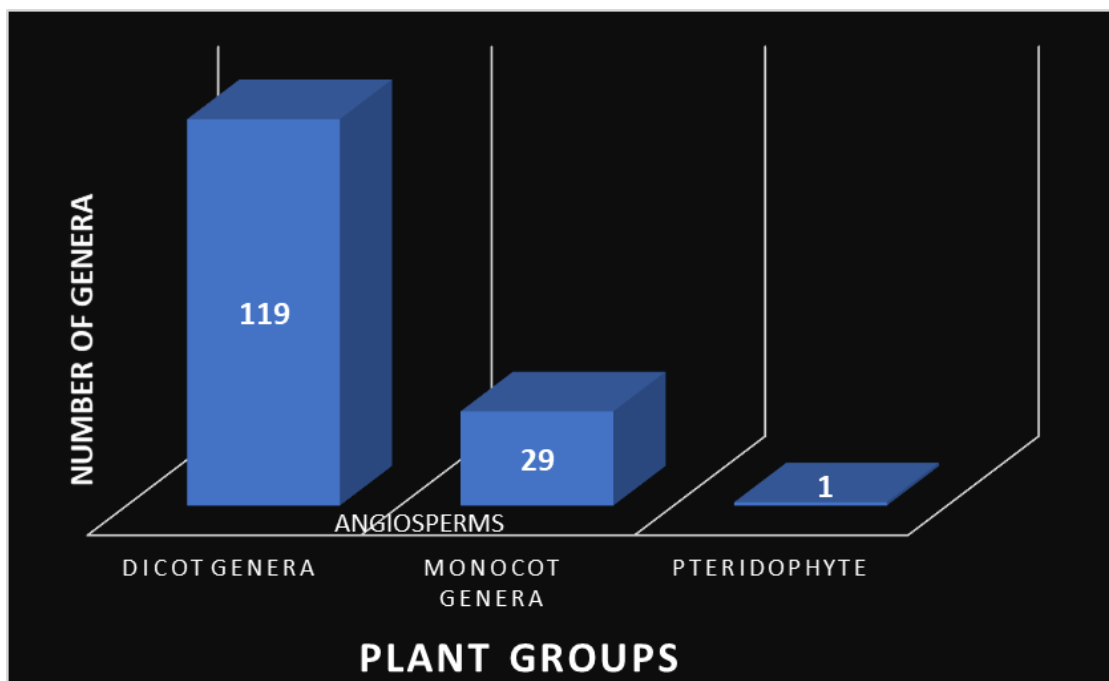
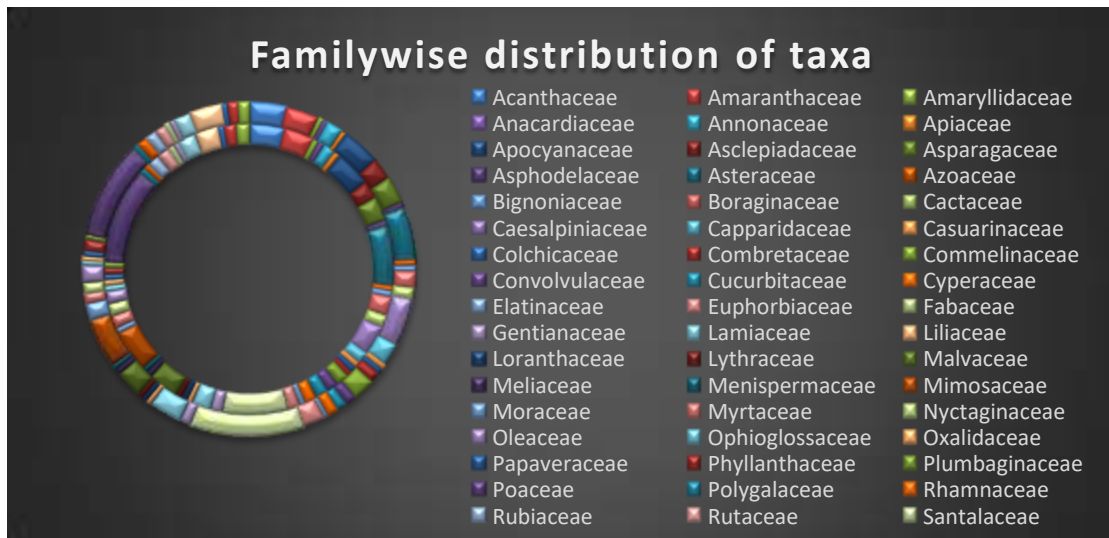


Figure 1: Distribution of different plant groups in study region

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In the present investigation, a total of 190 taxa belonging to 57 families of angiosperms have been recorded. Among 57 families Fabaceae (21), Poaceae (18) and Asteraceae (10) are the dominant families from the study region. Among 190 taxa occurring in the region 118 are used for various purposes like medicine, wild edible, ornamental, wild relative etc. The study has much diversity of dicotyledons with 155 taxa than monocotyledons with 34 taxa. Among the studied taxa 115 taxa are herbaceous which is dominant habit in the study area. A single member of pteridophyte *Ophioglossum lusitanicum* subsp. *coriaceum* (A. Cunn.) R.T. Clausen has been recorded from the study area.



**Figure 2: Family wise distribution of taxa in the study region**



**Figure 3: Different local uses of the plant species in the study region**

The Swatantrapur lake comprises unique floral diversity which represents typical deccan peninsular flora. The habitat is dominated by deciduous trees and herbaceous plants during monsoon. The habitat

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comprises open jail of custodians who live free in vicinity of the lake. This place is of prominent attraction in Sangli district to visit. The best season to visit the place is from July to October. Therefore, there is need of development of this place as tourist place which will certainly help in the uplifting the local economy and rural development.



**Figure 4:** A- *Tamarindus indica*, B-*Pithecellobium dulce*, C- *Dichrostachys cinerea*, D- *Tribulus terrestris*, E- *Acanthospermum hispidum*, F- *Caralluma fimbriata*, G- *Euphorbia tirucalli*, H- *Casuarina equisetifolia*

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Figure 5: A- *Capparis zeylanica*, B- *Celosia argentea*, C- *Cyanotis tuberosa*, D- *Ficus racemosa*, E- *Jasminum sambac*, F- *Santalum album*, G- *Syzygium cumini*, H- *Withania somnifera*, I- *Zyzyphus mauritiana*

Table 1: Checklist of species from the study region

Sr. No.	Botanical Name	Family	Common Name	Habit	Status
1.	<i>Andrographis paniculata</i> (Burm. f.) Wall.	Acanthaceae	Kade-chirayata	H	M
2.	<i>Barleria cristata</i> L. var. <i>cristata</i>	Acanthaceae	Pandhari Koranti	H	O
3.	<i>Crossandra infundibuliformis</i> (L.) Nees.	Acanthaceae	Aboli	H	O
4.	<i>Justicia adhatoda</i> L.	Acanthaceae	Adulsa	H	M
5.	<i>Justicia trinervia</i> Vahl.	Acanthaceae	Lahan Adulasa	H	
6.	<i>Lepidagathis cristata</i> Willd.	Acanthaceae	Bhui gend	H	

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7.	<i>Rungia repens</i> (L.) Nees.	Acanthaceae	Ghati Pittapapada	H	
8.	<i>Achyranthes aspera</i> L.	Amaranthaceae	Aghada	H	M, WE
9.	<i>Alternanthera pungens</i> Kunth.	Amaranthaceae	Chibu-kata	H	EW
10.	<i>Alternanthera sessilis</i> (L.) R. Br. ex DC.	Amaranthaceae	Kanchari	H	EW
11.	<i>Amaranthus viridis</i> L.	Amaranthaceae	Unadbhaji	H	EW
12.	<i>Celosia argentea</i> L.	Amaranthaceae	Kurdu	H	EW
13.	<i>Digera muricata</i> (L.) Mart.	Amaranthaceae	Ambati	H	WE
14.	<i>Crinum asiaticum</i> L.	Amaryllidaceae	Nagdamani	H	WO
15.	<i>Mangifera indica</i> L.	Anacardiaceae	Amba	T	E
16.	<i>Annona reticulata</i> L.	Annonaceae	Ramphal	MT	E
17.	<i>Annona squamosa</i> L.	Annonaceae	Sitaphal	MT	E
18.	<i>Polyalthia longifolia</i> (Sonn.) Thwaites	Annonaceae	Drooping Ashok	T	O
19.	<i>Trachyspermum ammi</i> (L.) Sprague	Apiaceae	Ajwain	H	E
20.	<i>Carissa carandas</i> L.	Apocyanaceae	Karavanda	S	WE
21.	<i>Cascabela thevetia</i> (L.) Lippold	Apocyanaceae	Bitti	S	O
22.	<i>Catharanthus pusillus</i> (Murray) G. Don	Apocyanaceae	Sanghaki	H	
23.	<i>Catharanthus roseus</i> (L.) G. Don.	Apocyanaceae	Sadaphuli	H	O, M
24.	<i>Cryptolepis buchanan</i> R. Br. ex Roem. & Schult.	Apocyanaceae	Dudh-vel	C	
25.	<i>Cryptostegia grandiflora</i> R. Br.	Apocyanaceae	Kavali	C	
26.	<i>Nerium oleander</i> L.	Apocyanaceae	Kanher	MT	O
27.	<i>Calotropis gigantea</i> (L.) W.T. Aiton	Asclepiadaceae	Rui	S	M
28.	<i>Calotropis procera</i> (Aiton) W.T. Aiton	Asclepiadaceae	Rui	S	M
29.	<i>Caralluma fimbriata</i> Wall.	Asclepiadaceae	Shenguli	H	M, WE
30.	<i>Pergularia daemia</i> (Forssk.) Chiov.	Asclepiadaceae	Utaraan	C	
31.	<i>Agave americana</i> L.	Asparagaceae	Ghayapat	PH	
32.	<i>Asparagus gonocladus</i> Baker.	Asparagaceae	Shataavari	C	M
33.	<i>Asparagus racemosus</i> Willd.	Asparagaceae	Shatavari	C	M
34.	<i>Chlorophytum borivillianum</i> Santapau & R. R. Fern.	Asparagaceae	Musali	H	M
35.	<i>Scilla indica</i> Roxb.	Asparagaceae	Raan Kanda	H	
36.	<i>Aloe vera</i> (L.) Burm. f.	Asphodelaceae	Korphad	H	M
37.	<i>Acanthospermum hispidum</i> DC	Asteraceae	Landaga	H	EW
38.	<i>Ageratum conyzoides</i> L.	Asteraceae	Osadi	H	EW
39.	<i>Echinops echinatus</i> Roxb	Asteraceae	Kate Chendu	H	W
40.	<i>Eclipta prostrata</i> (L.) L.	Asteraceae	Maka	H	M
41.	<i>Grangea maderaspatana</i> (L.) Poir.	Asteraceae	Mashipatri	H	
42.	<i>Launaea procumbens</i> (Roxb.) Ramayya & Rajagopal	Asteraceae	Pathari	H	WE
43.	<i>Parthenium hysterophorus</i> L.	Asteraceae	Gajar gavat	H	EW
44.	<i>Senecio edgeworthii</i> Hook. f.	Asteraceae	Hiwali Sonki	H	
45.	<i>Tridax procumbens</i> L.	Asteraceae	Ekdandi	H	EW, M
46.	<i>Xanthium strumarium</i> L.	Asteraceae	Landaga	H	EW
47.	<i>Trianthema portulacastrum</i> L.	Azoaceae	Pundhari-ghentuli	H	
48.	<i>Tecoma stans</i> (L.) Juss. ex Kunth	Bignoniaceae	Phutani	T	O

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49.	<i>Cardiospermum halicacabum</i> L.	Boraginaceae	Kanphuti	H	
50.	<i>Cordia dichotoma</i> G. Forst.	Boraginaceae	Bhokar	T	WE
51.	<i>Heliotropium indicum</i> L.	Boraginaceae	Bhurundi	H	
52.	<i>Cereus peruvianum</i> (L.) Mill.	Cactaceae	Kande-nivadung	H	
53.	<i>Opuntia elatior</i> Mill.	Cactaceae	Phadya Nivadung	H	WE
54.	<i>Caesalpinia pulcherrima</i> (L.) Sw.	Caesalpiniaceae	Sankeshwar	S	O
55.	<i>Cassia auriculata</i> L.	Caesalpiniaceae	Tarvad	S	M
56.	<i>Cassia occidentalis</i> L.	Caesalpiniaceae	Ran-takla	T	
57.	<i>Cassia siamea</i> Lam.	Caesalpiniaceae	Kassod	T	O
58.	<i>Cassia tora</i> L.	Caesalpiniaceae	Takala	H	WE
59.	<i>Cassia uniflora</i> Mill.	Caesalpiniaceae	Tarota	H	W
60.	<i>Delonix regia</i> (Bojer ex Hook.) Raf.	Caesalpiniaceae	Gulmohar	T	O
61.	<i>Sesbania sesban</i> (L.) Merr.	Caesalpiniaceae	Shevari	T	
62.	<i>Tamarindus indica</i> L.	Caesalpiniaceae	Chinch	T	WE, M
63.	<i>Capparis decidua</i> (Forssk.) Pax	Capparidaceae	Nepti	S	WE
64.	<i>Capparis zeylanica</i> L.	Capparidaceae	Wagati	C	WE
65.	<i>Cleome gynandra</i> L.	Capparidaceae	Pandhari tilwan	H	M
66.	<i>Cleome viscosa</i> L.	Capparidaceae	Pivali Tilwan	H	M
67.	<i>Casuarina equisetifolia</i> L.	Casuarinaceae	Suru	T	O
68.	<i>Iphigenia stellata</i> Blatt.	Colchicaceae	Gulabi bhuichakra	H	
69.	<i>Terminalia arjuna</i> (Roxb. ex DC.) Wight & Arn.	Combretaceae	Arjun	T	
70.	<i>Terminalia catappa</i> L.	Combretaceae	Jangali Badam	T	E
71.	<i>Cyanotis fasciculata</i> Schult. f.	Commeliaceae	Nilwanti	H	
72.	<i>Cyanotis tuberosa</i> Schult. f.	Commeliaceae	Ichaka	H	
73.	<i>Commelina diffusa</i> Burm. f.	Commelinaceae	Kanshura	H	
74.	<i>Commelina benghalensis</i> L.	Commelinaceae	Kena	H	WE
75.	<i>Evolvulus alsenoides</i> (L.)L.	Convolvulaceae	Shankhapushpi	H	M
76.	<i>Ipomoea carnea</i> Jacq.	Convolvulaceae	Besharam	S	W
77.	<i>Cucumis sativus</i> var. <i>hardwickii</i> (Royle ) Gabaev	Cucurbitaceae	Jangali kakadi	C	WR
78.	<i>Diplocyclos palmatus</i> (L.) C. Jeffrey.	Cucurbitaceae	Shivalingi	C	M
79.	<i>Cyperus rotundus</i> L.	Cyperaceae	Lavala	H	M
80.	<i>Kyllinga triceps</i> Sw.	Cyperaceae	Shwetanirvisa	H	
81.	<i>Bergia ammannioides</i> Roxb.	Elatinaceae	Water fire	H	
82.	<i>Croton bonplandianus</i> Baill.	Euphorbiaceae	Ban tulasi	H	W
83.	<i>Euphorbia geniculata</i> Ortega	Euphorbiaceae	Dudhani	H	EW
84.	<i>Euphorbia hirta</i> L.	Euphorbiaceae	Dudhani	H	EW
85.	<i>Euphorbia tirucalli</i> L.	Euphorbiaceae	Sher	H	
86.	<i>Alysicarpus belgaumensis</i> Wight.	Fabaceae	Gulabi Shevra	H	
87.	<i>Bauhinia purpurea</i> L.	Fabaceae	Kanchan	T	O
88.	<i>Bauhinia racemosa</i> Lam.	Fabaceae	Apata	T	O
89.	<i>Butea monosperma</i> (Lam.) Taub.	Fabaceae	Palash	T	O
90.	<i>Crotalaria filipes</i> Benth.	Fabaceae	Phatphati	H	
91.	<i>Crotalaria juncea</i> L.	Fabaceae	Tag	H	
92.	<i>Crotalaria vestita</i> Baker	Fabaceae		H	

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93.	<i>Dalbergia sissoo</i> Roxb. ex DC	Fabaceae	Shishav	T	
94.	<i>Indigofera cordifolia</i> B. Heyne ex Roth	Fabaceae	Wakal	H	
95.	<i>Indigofera linifolia</i> (L.f.) Retz.	Fabaceae	Lal godhadi	H	
96.	<i>Indigofera tinctoria</i> L.	Fabaceae	Neel	H	
97.	<i>Indigofera trifoliata</i> L.	Fabaceae	Kathi	H	
98.	<i>Indigofera trita</i> L. f.	Fabaceae	-	H	
99.	<i>Mukia maderaspatana</i> (L.) M. Roem.	Fabaceae	Chirati	H	
100.	<i>Pongamia pinnata</i> (L.) Pierre.	Fabaceae	Karanj	T	M
101.	<i>Smithia blanda</i> Wall. ex Wight & Arn.	Fabaceae	Kavala	H	
102.	<i>Tephrosia purpurea</i> (L.) Pers.	Fabaceae	Unhali	H	
103.	<i>Vigna aconitifolia</i> (Jacq.) Maréchal	Fabaceae	Matki	C	WR
104.	<i>Vigna indica</i> T. M. Dixit, K. V. Bhat & S. R. Yadav	Fabaceae	Ran-udid	C	WR
105.	<i>Vigna sublobata</i> (Roxb.) Bairig., Panda, B.P. Choudhury & Patnaik	Fabaceae	Ran-mung	C	WR
106.	<i>Vigna vexillata</i> (L.) A. Rich.	Fabaceae	Ran-tur	C	WR
107.	<i>Canscora diffusa</i> (Vahl) R. Br. ex Roem. & Schult.	Gentianaceae		H	
108.	<i>Exacum lawii</i> C. B. Clarke	Gentianaceae	Lahan Chirayat	H	
109.	<i>Leucas aspera</i> (Willd.) Link	Lamiaceae	Shakaroba	H	
110.	<i>Leucas stelligera</i> Wall. ex Benth.	Lamiaceae	Goma	H	
111.	<i>Ocimum basilicum</i> L.	Lamiaceae	Ran-tulasi	H	M
112.	<i>Ocimum gratissimum</i> L.	Lamiaceae	Krishana tulasi	H	M
113.	<i>Ocimum sanctum</i> L.	Lamiaceae	Tulasi	H	M
114.	<i>Clerodendron inerme</i> Gaertn.	Lamiaceae	Kadu –mehandi	H	
115.	<i>Dipcadi ursulae</i> Blatt.	Liliaceae	-	H	
116.	<i>Dendrophthoe trigona</i> Danser ex Sant.	Loranthaceae	Bandgul	H	
117.	<i>Lawsonia inermis</i> L.	Lythraceae	Mehandi	MT	M
118.	<i>Abelmoschus esculentus</i> (L.) Moench	Malvaceae	Bhendi	H	E
119.	<i>Abutilon indicum</i> (L.) Sweet.	Malvaceae	Mudra	S	M
120.	<i>Hibiscus rosa-sinensis</i> L.	Malvaceae	Jaswandi	S	O,M
121.	<i>Sida rhombifolia</i> L.	Malvaceae	Bala	H	M
122.	<i>Thespesia populnea</i> (L.) Sol. ex Correa	Malvaceae	Gul bhendi	T	O
123.	<i>Azadirachta indica</i> A. Juss.	Meliaceae	Neem	T	M
124.	<i>Tinospora cordifolia</i> (Willd.) Miers ex Hook. f. & Thomson	Menispermaceae	Gulvel	C	M
125.	<i>Acacia catechu</i> (L.f.) Willd.	Mimosaceae	Khair	T	M
126.	<i>Acacia leucophloea</i> Willd.	Mimosaceae	Hivar	T	
127.	<i>Acacia nilotica</i> (L.) Willd. ex Delile	Mimosaceae	Babhool	T	M
128.	<i>Albizia lebbek</i> (L.) Benth.	Mimosaceae	Shirish	T	O
129.	<i>Mimosa pudica</i> L.	Mimosaceae	Lajalu	H	O, EW
130.	<i>Pithecellobium dulce</i> (Roxb.) Benth.	Mimosaceae	Vilayati Chinch	T	E
131.	<i>Prosopis juliflora</i> (Sw.) DC.	Mimosaceae	Chillar	T	W
132.	<i>Samanea saman</i> (Jacq.) Merr.	Mimosaceae	Gulabi Shirish	T	O
133.	<i>Dichrostachys cinerea</i> (L.) Wight & Arn.	Mimosaceae	Durangi Babhool	H	
134.	<i>Ficus benghalensis</i> L.	Moraceae	Vad	T	E



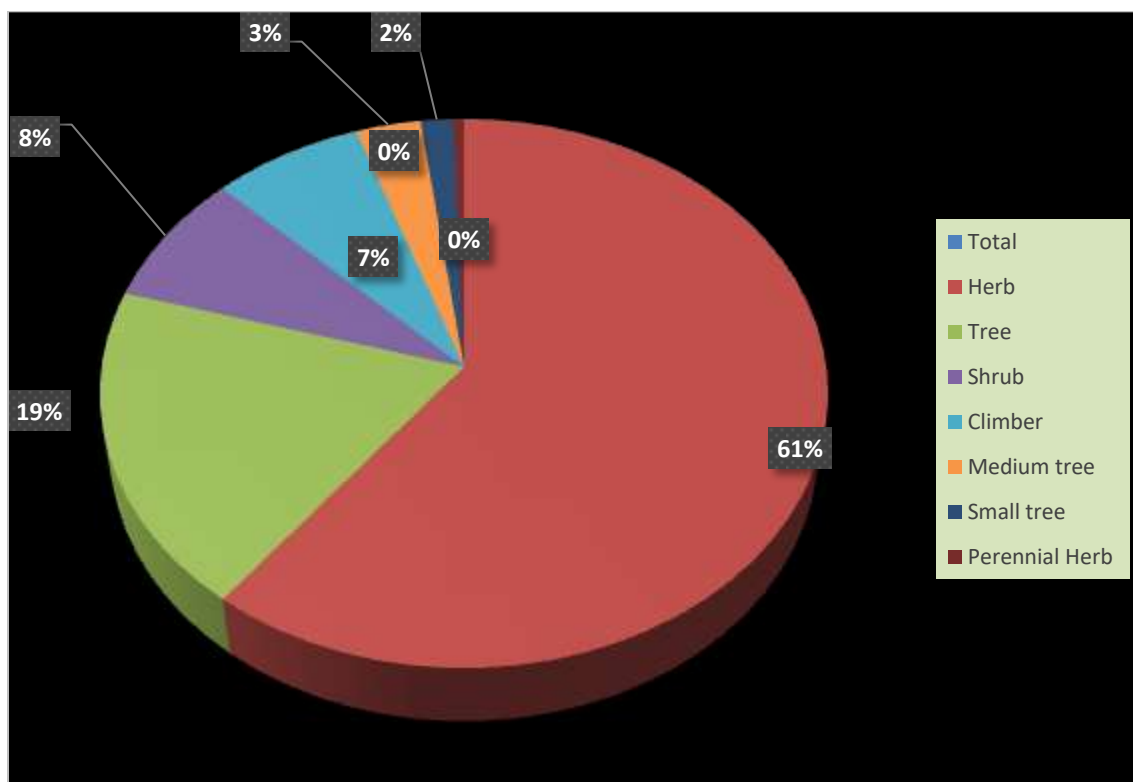
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135.	<i>Ficus racemosa</i> L.	Moraceae	Umber	T	E
136.	<i>Ficus religiosa</i> L.	Moraceae	Pimpal	T	
137.	<i>Psidium guajava</i> L.	Myrtaceae	Peru	MT	E
138.	<i>Syzygium cumini</i> (L.) Skeels	Myrtaceae	Jambhul	T	E
139.	<i>Boerhavia diffusa</i> L.	Nyctaginaceae	Punarnava	H	M
140.	<i>Bougainvillea spectabilis</i> Willd.	Nyctaginaceae	Kagadi phul	C	O
141.	<i>Jasminum malabaricum</i> Wight.	Oleaceae	Kusar	S	WO
142.	<i>Jasminum sambac</i> (L.) Aiton.	Oleaceae	Mogara	S	O
143.	<i>Nyctanthes arbor-tristis</i> L.	Oleaceae	Parijatak	MT	O
144.	<i>Ophioglossum lusitanicum</i> subsp. <i>coriaceum</i> (A. Cunn.) R.T. Clausen	Ophioglossaceae	-	H	
145.	<i>Oxalis corniculata</i> L.	Oxalidaceae	Ambushi	H	WE, W
146.	<i>Argemone mexicana</i> L.	Papaveraceae	Pivala dhotra	H	W
147.	<i>Phyllanthus emblica</i> L.	Phyllanthaceae	Amala	T	M, E
148.	<i>Phyllanthus reticulata</i> Poir.	Phyllanthaceae	Nili	T	E
149.	<i>Plumbago zeylanica</i> L.	Plumbaginaceae	Chitrak	S	M
150.	<i>Aristida funiculata</i> Trin. & Rupr.	Poaceae	Lappa	H	
151.	<i>Brachiaria eruciformis</i> (Sm.) Griseb.	Poaceae	-	H	
152.	<i>Brachiaria reptans</i> (L.) C.A. Gardner & C.E. Hubb.	Poaceae	-	H	
153.	<i>Chloris barbata</i> Sw.	Poaceae	Gondvel	H	
154.	<i>Chloris virgata</i> Sw.	Poaceae	-	H	
155.	<i>Chrysopogon fulvus</i> (Spreng.) Chiov.	Poaceae	Dongari gavat	H	
156.	<i>Cynodon dactylon</i> (L.) Pers.	Poaceae	Harali	H	M
157.	<i>Dactyloctenium aegyptium</i> (L.) Willd.	Poaceae	Makada	H	
158.	<i>Dichanthium annulatum</i> (Forssk.) Stapf	Poaceae	-	H	
159.	<i>Digitaria ciliaris</i> (Retz.) Koeler	Poaceae	-	H	
160.	<i>Dinebra retroflexa</i> (Vahl) Panz.	Poaceae	-	H	
161.	<i>Eragrostiella bifaria</i> (Vahl) Bor	Poaceae	-	H	
162.	<i>Eragrostis minor</i> Host.	Poaceae	-	H	
163.	<i>Melanocenchris jacquemontii</i> Jaub. & Spach	Poaceae	-	H	
164.	<i>Paspalidium flavidum</i> (Retz.) A. Camus	Poaceae	-	H	
165.	<i>Pennisetum pedicellatum</i> Trin.	Poaceae	-	H	
166.	<i>Setaria intermedia</i> Roem. & Schult.	Poaceae	-	H	
167.	<i>Sporobolus capillaries</i> Miq.	Poaceae	Chiman Chara	H	
168.	<i>Polygala arvensis</i> Willd.	Polygalaceae	Sanjivani	H	
169.	<i>Ziziphus jujuba</i> Mill.	Rhamnaceae	Ber	ST	E
170.	<i>Ziziphus mauritiana</i> Lam.	Rhamnaceae	Bor	ST	E
171.	<i>Oldenlandia corymbosa</i> L.	Rubiaceae	Pittapapada	H	
172.	<i>Spermacoce pusilla</i> Wall.	Rubiaceae	Tarkadal	H	
173.	<i>Aegle marmelos</i> (L.) Correa	Rutaceae	Bel	T	M, E
174.	<i>Balanites aegyptiaca</i> (L.) Delile	Rutaceae	Hingan	T	M
175.	<i>Santalum album</i> L.	Santalaceae	Chandan	T	M, O
176.	<i>Mimusops elengi</i> L.	Sapotaceae	Bakul	T	WE, O
177.	<i>Bacopa monnieri</i> (L.) Wettst.	Scrophulariaceae	Neerbrahmi	H	M

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178.	<i>Sopubia delphinifolia</i> D. Don.	Scrophulariaceae	Dudhali	H	
179.	<i>Striga densiflora</i> (Benth.) Benth.	Scrophulariaceae	Aagya	H	P
180.	<i>Datura inoxia</i> Mill.	Solanaceae	Pandhara Dhotra	H	M
181.	<i>Datura metel</i> L.	Solanaceae	Kala Dhotra	H	M
182.	<i>Physalis minima</i> L.	Solanaceae	Ran Popati	H	
183.	<i>Solanum indicum</i> L.	Solanaceae	Chichurdi	H	M, WE
184.	<i>Solanum xanthocarpum</i> Schrad. & J.C. Wendl.	Solanaceae	Kate ringani	H	M
185.	<i>Withania somnifera</i> (L.) Dunal.	Solanaceae	Ashwagandha	S	M
186.	<i>Typha angustifolia</i> L.	Typhaceae	Pankanis	H	M
187.	<i>Dodonaea viscosa</i> Jacq.	Verbenaceae	Bandukicha pala	S	M
188.	<i>Vitex negundo</i> L.	Verbenaceae	Nirgudi	ST	M
189.	<i>Fagonia cretica</i> L.	Zygophyllaceae	Dhamasa	H	
190.	<i>Tribulus terrestris</i> L.	Zygophyllaceae	Gokharu	H	M

Note: O = Ornamental; H= Herb; S = Shrub; T= Tree; MT = Medium Tree; ST = Small Tree; W = Weed; M = Medicinal; PH = Perennial Herb; WE = Wild Edible; E = Edible; EW= Exotic Weed; WR = Wild Relative; P = Parasite; WO= Wild Ornamental.



**Figure 6: Distribution of Habit among the studied taxa**

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