



# A Check List of Angiospermic Plants of Sheikh Buddin National Park, District Dera Ismail Khan, Khyber Pakhtunkhwa, Pakistan

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**Abstract** | Exploration of regional flora provide base for conservation management, taxonomy and ethnobotany. In addition, Diverse ecosystems are habitat rich and highly productive. Determining species diversity and exploration, we conducted the taxonomical survey and collected information's about the floristic composition of Sheikh Buddin National Park (SBNP). As a result 117 plant species belonged to 99 genera and 52 families were collected, preserved, identified, and deposited as voucher specimens in the Laboratory of Plant Ecology, Department of Botany, University of Malakand. Among these monocots were represented by 17 species under 15 genera and 6 families, while Dicots were represented by 100 species belonging to 84 genera's and 46 families. The data obtained from the survey revealed that Poaceae and Lamiaceae having 9 plant species (each), followed by Asteraceae with 7 species, Apocynaceae and Fabaceae with 6 plants species each while Mimosaceae and Solanaceae with 5 species were the dominant families. Among tree strata *Acacia modesta*, *Olea ferruginea* and *Capparis decidua*, in shrub stratum *Prosopis juliflora*, *Dodonea viscosa*, *Echinops echinatus* while among herbs *Cymbopogon jawarncusa*, *Cynodon dactylon*, *Peganum harmala* were common abundant species of the study area. Throughout study area ground flora was common with scattered shrubs. Studied flora reflect xerophytic nature.

**Keywords** | Floristic diversity, Dominant Species, Sheikh Buddin National Park, Dera Ismael Khan, Pakistan

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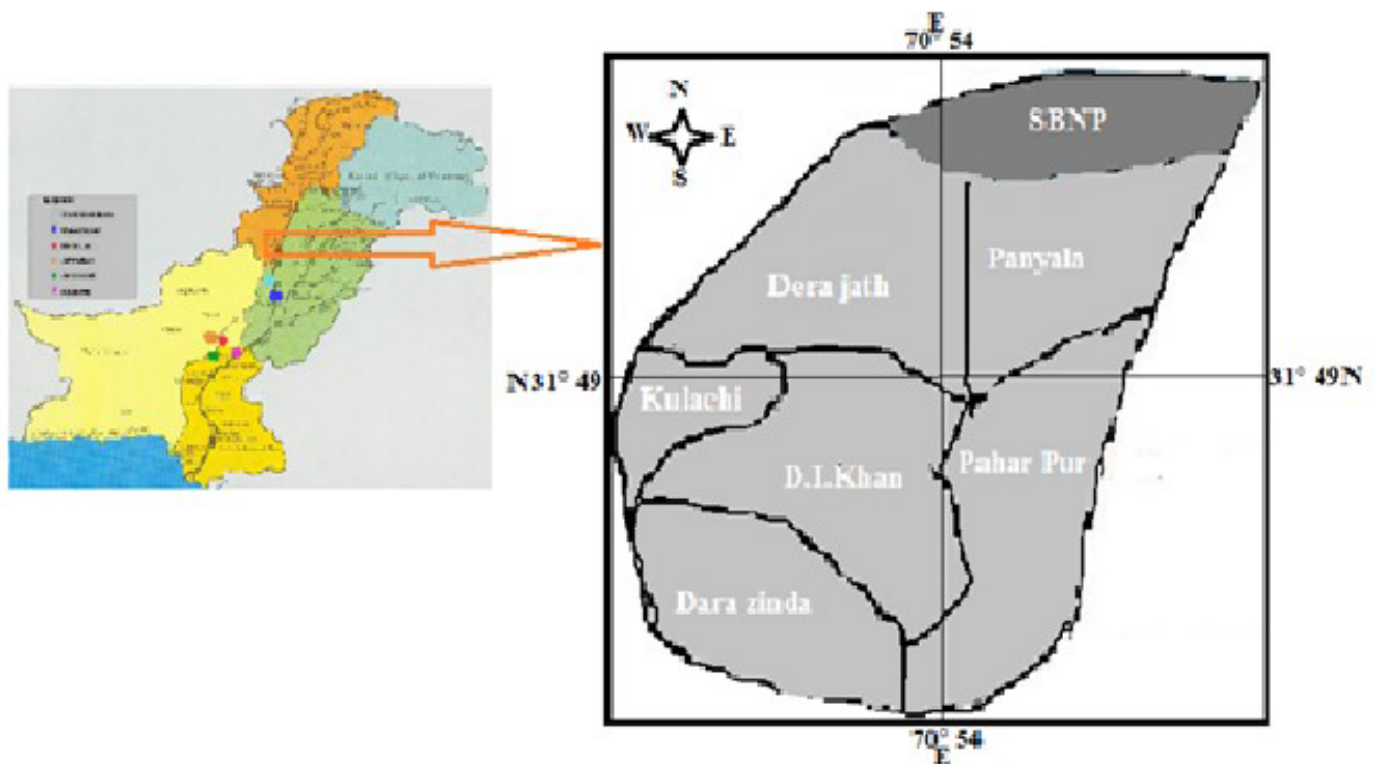
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## INTRODUCTION

An area which is set aside by the national government for the protection of natural environment is known as a national park. According to the World Conservation Union it is a natural area selected in order to protect the ecological integrity of one or more ecosystems for the present and upcoming generation (Ahmad and Ann, 2011). For the conservation of biodiversity, educational, historical recreational purposes the protected areas are most important in many ways. Overall all there are 102102 protected areas in the world which covers 18.8 million km<sup>2</sup> of the earth (Datar and Lakshminarasimhan, 2013).

In Pakistan there are 26 national parks covering about 3%

area of the country. The largest one is that Central Karakoram National Park, while Toli Pir (1000 acre area) is the smallest national park of Pakistan. Sheikh Buddin National Park is one of them, situated in the Dera Ismail Khan District, which is the southernmost district of Khyber Pakhtunkhwa (KPK), Pakistan. It is believed that Hazrat Sheikh Bahauddin Zakariya, the great Sufi saint of Multan has traveled to this town to preach Islam, while others believed that the hill got the name Sheikh Bahauddin after Pir Sheikh Bahauddin, whose tomb is on the top of the hill, his offspring's are still living here and are locally known as Pirs of Sheikh Badin., which later on shortened to Sheikh Buddin. The park spreads over an area of 15540 hectare and was upgraded to the category of National Park (NP) for the aims of conserving its biodiversity, beautiful



**Figure 1:** Showing the SBNP (Dark) in Dera Ismael Khan district

sceneries and history as well as educational and recreational tenacities as a result of notification number . Forest 1 (FFT) VIII. Peshawar, Dated 15.07.1993 (Zahoor, 2010).

In Pakistan there are 5521 recorded species of angiosperms belonging to 1572 genera, mostly present in the hilly areas of the country (Khan et al., 2011; Ali and Qaiser, 1986).

Arshad et al. (2013) collected 88 plant species from Chitral Gol National Park in their report about assessing potential habitats of Kashmir Markhor in Chitral Gol National park. They use multivariate techniques and divide the Park in 1V communities. Similarly, Hussain et al. (2013) explored the vegetation structure and dynamics of the vegetation in Central Karakoram National Park. Qureshi et al. (2011) reported 62 plant species from Khunjerab National Park, in which the most important family was Primulaceae which contributed 11.29% of the total flora. Khan et al. (2011) documented 31 species belonging to 21 families along with their medicinal uses from Chitral Gol National Park. Hussain and Parveen (2009) documented 70 plant species describing their life form and phonological characters from Kirthar range. From the Dureji game reserve of Balochistan Province Perveen et al. (2008) recorded 79 plant species belonged to 66 genera's and 32 families, in which family Poaceae was the dominant family with 12 plant species. They also reported that the Chaemophytes were the most dominant class of life form in the study area followed by Phanerophytes. Similarly research was conducted on 6 most prominently underutilized plant species

and their medicinal and food uses were studied in Ayubia National Park by Ahmad and Jawed (2007). While, Hameed et al. (2002) described the vegetation of Lal Suhrna National Park and reported 56 plant species belonging to 20 families of which Poaceae was the largest family with 19 grass species. A phytosociological survey of the vegetation in Machyara National Park was described by Malik and Zandiyal (1996). To date no published report is about the flora of Sheikh Buddin National Park, so this was the first attempt to provide a check list of angiosperm plants of the study area and this will provide necessary information's for the future researches. The aim of the present study was to explore the vegetation of Sheikh Buddin National Park.

## MATERIALS AND METHODS

The Sheikh Buddin National Park is situated in the Dera Ismael Khan District of Khyber Pakhtunkhwa spanning between  $32^{\circ}16''$  to  $32^{\circ}34''$  N latitudes and  $70^{\circ}45''$  to  $71^{\circ}12''$  E longitudes with an altitudinal range of 300-1350 m above sea level Marwat et al. (2012a) (Figure 1). The area is highly diversified not only in mineral resources but also hub to biodiversity to micro-climatic regimes. Geographically the study area is situated in such a way that its boundaries touches the South Wazirestan Agency on the west; the districts of Tank and Lakki Marwat on the north, river Indus, Mian Wali and Bhakkar of Punjab in the east and Dera Ghazi Khan of Punjab province in the south Marwat and Khan (2008). The area has distinct summer and winter seasons. The climatic conditions of the area reveal that Jan-

uary (12°C) is the coldest and June (35°C) is the hottest months of the year, respectively. During winter the mean maximum and minimum temperature are 20.3°C and 4.2°C respectively, while 35°C and 22°C during summer. Average annual rainfall is 200 mm (Marwat et al., 2012b), while total rainfall during study period was 276mm (Figure 2).

also studied. Genera were arranged in alphabetical order.

## RESULTS AND DISCUSSION

Intensive and Extensive tours in various seasons and ecosystem resulted in collection of 117 plant species belonging to 99 genera from the Sheikh Buddin National Park. These plants species belong to 51 families in which 6 (11.76%) were monocots, one gymnosperm while rest of the families (86.27%) were dicots as shown in Table 1 (given at the end).

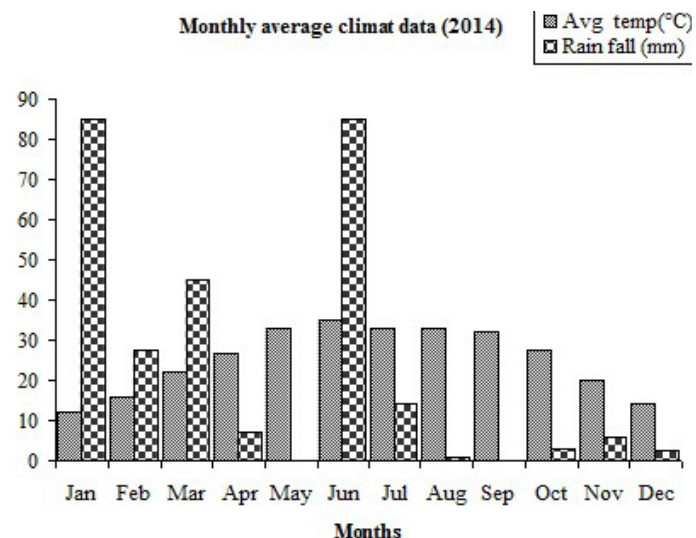


Figure 2: Mean average temperature and rain fall of the year 2013

Due to these harsh and xeric conditions the study site provide a well substratum to xerophytes communities, developing as subtropical dry ecosystem (Champion et al., 1965). Dominant species of the area are *Acacia modesta*, *Prosopis juliflora*, *Olea ferruginea*, *Capparis decidua*, *Tamarax aphla* *Dodonea viscosa*, *Saccharum species* and *Cymbopogon species* (Zahoor et al., 2009).

The present check list of angiosperms of Sheikh Buddin National Park is a result of various field collections and as a laboratory work from March 2013 to April 2014. For the collection and identification of living, wild and cultivated Angiospermic species, monthly field trips were arranged. The Park enclosures was thoroughly surveyed and photograph of various plant species were taken with the help of a digital camera and live plants were collected, pressed on, dried and preserved with their full morphological structure (roots, stem, leaves, flowers and fruits) on the herbarium sheet following the standard techniques of (Decoteau and Kelly, 1985; Bean, 2013). Field information such as habit, flower color and flowering season along with their local names (Pashto names) were collected from the local knowledgeable peoples.

The species were identified with the help of available literature and flora of Pakistan (Ali and Qaiser, 1995-2008) and were confirmed by comparing with authentic specimens available and deposited at the botanical garden Herbarium Department of Botany, University of Malakand, Chakdara Dir lower, Pakistan. In addition specimens which were collected from other national parks and tropical forests were

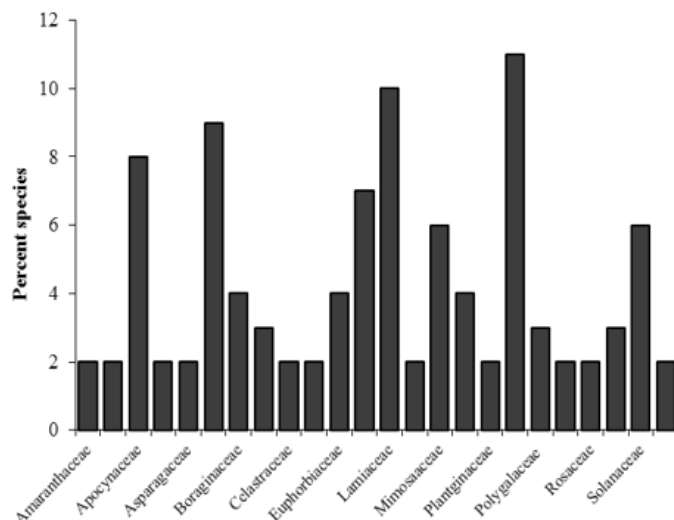


Figure 3: Representing the leading plants families of Sheikh Buddin national Park

The flora of the study area was dominated by the members of Poaceae and Lamiaceae contributed 7.75% by each one followed by Asteraceae 6%, Apocyanaceae and Fabaceae 5.17% each, Mimosaceae and Solanaceae with 4.31% each one. While rest of the families showed poor floristic composition of the National Park as shown in Figure 3. Majority (60%) of the families were monospecific. Floral abundance show that majority of the species were found in abundant categories (Figure 4).

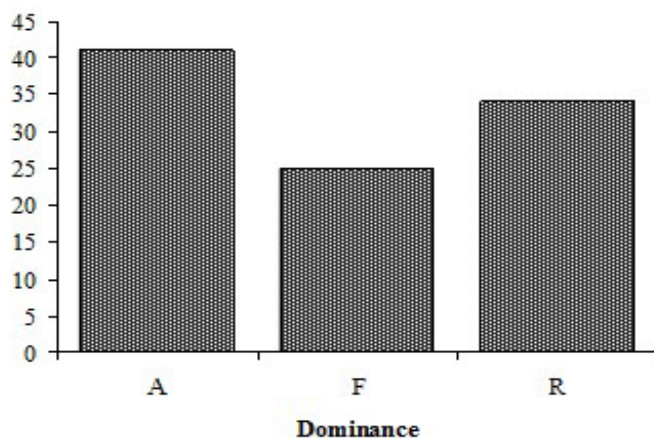
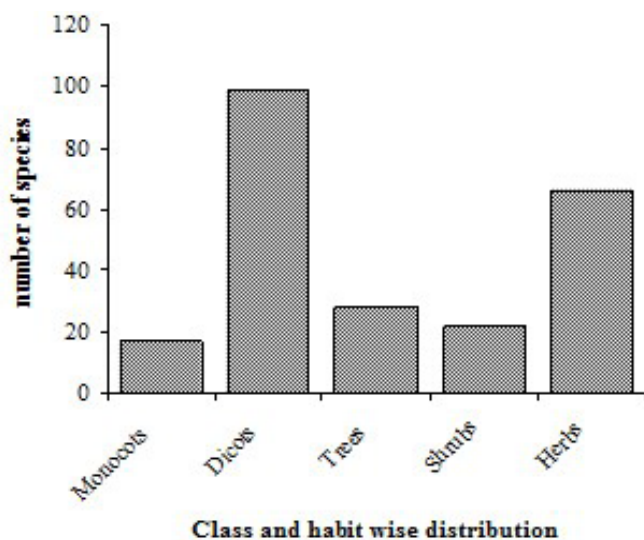


Figure 4: Percent abundance of species

Among the monocots the family Poaceae had 9 species and

7 generas, liliaceae, Arecaceae and Asparagaceae each one were represented by 2 species while rest of the families (asphodelaceae and cyperaceae) were represented by 1 species. In Dicots the Lamiaceae was the largest family including 9 species followed by Asteraceae with 7 species and 6 generas, Fabaceae and apocyanaceae were the 3<sup>rd</sup> leading families of dicots representing 6 species, While Mimosaceae and solanaceae were the 4<sup>th</sup> largest families with 5 plant species and 3 generas of each one. Other well represented families were Boraginaceae, Brassicaceae, Euphorbiaceae, Scrophulariaceae and Zygophyllaceae with 3 specie each. The remaining 30 families were represented by one species each indicating that these families have poor floristic representation in the overall vegetation of the National Park.

Among the 117 species 28 were trees, 22 shrubs and 67 were herbs. Among trees *Acacia modesta*, *Olea ferruginea*, *Salvadora oleoides*, in shrubs *Prosopis juliflora*, *Dodonea viscosa* and *Rhazya stricta*, while among herbs *Cymbopogon species*, *Saccharum bengalense* and *Cynodon dactylon*, *Peganum harmala* were dominant species. Table 1 also shows that there were 47 abundant species, 29 frequent while 40 species were rare. Most of the abundant species were herbs and some shrubs, while most of the shrubs and some trees were frequently distributed whereas few of the trees and herbs were rare in the National Park. Among the trees *Acacia modesta*, *Olea ferruginea* were abundant and frequently occurring species. In shrubs the most abundant species were *Prosopis juliflora* at low altitude and *Dodonea viscosa* at high altitude while in herbs grasses were dominated in the entire study area.



**Figure 5:** Showing class and habit-wise distribution of the angiosperms plants in SBNP, D. I. Khan

*Aerva javanica*, *Rhazya stricta*, *Echinops echinatus*, *Launaea procumbens*, *Calotropis procera*, *Periploca aphylla*, *Euphorbia prostrata*, *Acacia nilotica*, *Albahi maurorum*, *Ziziphus nummularia*, *Salvadora oleoides*, *Solanum surattense*, *Tamarix dioica* and *Tamarix aphylla* etc., were recorded by Perveen et

al. (2008) Dureji (Khirthar Range) while all of the above mentioned species were recorded by us from the Sheikh Buddin National Park. *Sophora mollis*, *Rumex hastatus*, *Filago hardwerica*, *Purtulaca oleraceae*, *Chenopodium album* and *Convolvus arvensis*, were collected by Arshad et al. (2013) from Chitral Gol National Park and all of these plants species were also found in the study area.

Figure 5 shows the class-wise and habit wise distribution of the species in Sheikh Baddin National Park. It is clear from Figure 5 that the contribution of herbs was more than trees and shrubs, similarly the floristic composition of trees was more than that of shrubs. Figure 5 also indicated the distribution of monocots is higher than that of dicots in the Park.

## CONCLUSION

The study area face sever biotic and abiotic pressure, due to which diversity and composition of natural flora being vanishing. If proper management, care and protection were not taken, the area would become a barren area in near decades. This loss will not only effect climate but also, socioeconomic level of the area.

## CONFLICT OF INTEREST

Authors declare that their is no conflict of interest in this work.

## AUTHORS' CONTRIBUTION

Nasrullah Khan designed the project, Atta Ullah collected field data and prepared early draft of manuscript while Zahid Muhammad help in field work, preparing and designing the manuscript and figures.

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**Table 1: Showing Binomial, Habit, Local name, Family and Population of plant species in SBPN**

S No.	Binomial	H	Local name	Family	P	VNo.
1	<i>Acacia modesta</i> Wall.	T	Palosa	Mimosaceae	A	5319
2	<i>Acacia nilotica</i> (L.) Willd.ex Delile.	T	Kikar	Mimosaceae	F	5320
3	<i>Aerva javanica</i> (Burm.f.) juss. Ex Schult	H	Speraie	Amaranthaceae	A	5321
4	<i>Agave sisalana</i> Perrine ex Engelm.	S	Kharwazh	Asparagaceae	R	5322
5	<i>Alianthus altissima</i> (Mill.) Swingle.	T	Bakanra	Simaroubaceae	R	5323
6	<i>Albizia lebback</i> (L.) Benth	T	Srine	Mimosaaceae	R	5324
7	<i>Alhagi maurorum</i> Medik.	H	Thundan	Fabaceae	F	5325
8	<i>Allium griffithianum</i> Boiss, Diagn.	H	Khakol	Liliaceae	F	5326
9	<i>Aloe vera</i> L.	H	Khar ghawzh	Liliaceae	A	5327
10	<i>Amaranthus viridis</i> L.	H	Ranzaqa	Amaranthaceae	A	5328
11	<i>Anagallis arvensis</i> L.	H	Shin gull	Primulaceae	A	5329
12	<i>Aristida adscensionis</i> L.	H	Bambasaie	Poaceae	A	5330
13	<i>Asparagus capitatus</i> Baker.	H	Unknown	Asparagaceae	A	5331
14	<i>Asphodelus tenuifolius</i> Cav.	H	Piazi	Asphodelaceae	F	5332
15	<i>Astragalus hamosus</i> L.	H	Unknown	Fabaceae	A	5333
16	<i>Boerhavia procumbens</i> Banks ex Roxb.	H	Unknown	Nyctaginaceae	F	5334
17	<i>Bromus japonicus</i> Houtt.	H	Unknown	Poaceae	F	5335
18	<i>Calligonum polygonoides</i> L.	S	Balanza	Polygonaceae	R	5336
19	<i>Calotropis procera</i> (Ait) W.T. Aiton.	S	Spalmaka	Asclepiadaceae	A	6337
20	<i>Cannabis sativa</i> L.	H	Bang	Cannabanaceae	R	5338
21	<i>Capparis decidua</i> (Forssk.) Pax	T	Kirra	Capparidaceae	R	5339
22	<i>Caralluma edulis</i> (Edgew.) Benth	H	Pamanaye	Apocynaceae	R	5340
23	<i>Carthamus oxyacantha</i> M. Bieb	H	Kareza	Asteraceae	R	5341
24	<i>Cecnbrus ciliaris</i> L.	H	Bambasaie	Poaceae	A	5342

25	<i>Chenopodium album</i> L.	H	Surmaie	Chenopodiaceae	F	5343
26	<i>Chenopodium murale</i> L.	H	Surmaie	Chenopodiaceae	F	5344
27	<i>Chrozophora tinctoria</i> (L.) Juss.	H	Unknown	Euphorbiaceae	F	5345
28	<i>Citrullus colocynthis</i> (L.) Schrad.	H	Ghata maraghoniye	Cucurbitaceae	A	5346
29	<i>Convolvulus arvensis</i> L.	H	Parwathiyie	Convolvulaceae	F	5347
30	<i>Conyza stricta</i> Willd.	H	Unknown	Asteraceae	A	5348
31	<i>Cordia myxa</i> L.	T	Lasora	Boraginaceae	R	5349
32	<i>Cotoneaster nummularia</i> Fischer and C.A.Meyer.	S	Mamanra	Rosaceae	R	5350
33	<i>Cymbopogon distans</i> (Nees ex Steud.) Will. Watson.	H	Sargaraie	Poaceae	A	5351
34	<i>Cymbopogon jawarncusa</i> (Jones) Schult.	H	Sargaraie	Poaceae	A	5352
35	<i>Cynodon dactylon</i> (L.) Pers.	H	Drab, Barawa	Poaceae	A	5353
36	<i>Cyperus rotundus</i> L.	H	Dila (Sedge)	Cyperaceae	F	5354
37	<i>Dalbergia sissoo</i> Roxb. Ex DC.	T	Shawa	Fabaceae	R	5355
38	<i>Datura metel</i> L.	S	Barbaka	Solanaceae	F	5356
39	<i>Dodonaea viscosa</i> (L.) Jacq.	S	Shamshad	Sapindiceae	A	5357
40	<i>Echinops echinatus</i> Roxb.	S	A ghra barbaka	Asteraceae	A	5358
41	<i>Ehretia obtusifolia</i> Hochst. ex A. DC.	S	Karaghonaie	Boraginaceae	F	5359
42	<i>Eragrostis minor</i> Host.	H	Baterey khwar	Poaceae	A	5360
43	<i>Erodium cicutarium</i> (L.) L Her. ex Aiton.	H	Unknown	Geraniaceae	F	5361
44	<i>Eruca sativa</i> Mill.	H	Thrikh weiraie	Brassicaceae	F	5362
45	<i>Eucalyptus lanceolatus</i> Honey.	T	Lachaie	Myrtaceae	R	5363
46	<i>Euphorbia helioscopia</i> L.	H	Unknown	Euphorbiaceae	A	5364
47	<i>Euphorbia prostrata</i> Aiton.	H	Thora kunda	Euphorbiaceae	A	5365
48	<i>Fagonia indica</i> Burm. f.	H	Spelaghzaie	Zygophyllaceae	F	5366
49	<i>Farsetia jacquemontii</i> Hook. f. & Thomson.	H	Melangaie	Brassicaceae	A	5367
50	<i>Ficus carica</i> L.	T	Anjir(thughan)	Moraceae	R	5368
51	<i>Ficus palmata</i> Forssk.	T	Jngli anjir	Moraceae	R	5369
52	<i>Filago hurdwarica</i> (Wall. ex DC.) Wagenitz.	H	Unknown	Asteraceae	A	5370
53	<i>Grewia optiva</i> Drumm. ex Burret.	T	Pasthawonaie	Tilaceae	R	5371
54	<i>Gymnosporia royleana</i> Wall. Ex Lawson	S	Soor azghey	Celastraceae	A	5372
55	<i>Heliotropium strigosum</i> Willd.	H	Unknown	Boraginaceae	A	5373
56	<i>Isodon rugosus</i> (Wall. ex Benth.) Codd.	H	Unknown	Lamiaceae	F	5374
57	<i>Kickxia incana</i> (Wall.) Pennel.	H	Unknown	Scrophulariaceae	F	5375
58	<i>Kickxia ramosissima</i> (Wall.) Janch.	H	Unknown	Scrophulariaceae	F	5376
59	<i>Lallemantia royleana</i> (Benth.) Benth.	H	Unknown	Lamiaceae	A	5377
60	<i>Launaea nudicaulis</i> (L.) Hook.f	H	Parwathaie	Asteraceae	A	5378
61	<i>Launaea procumbens</i> (Roxb.) Ram. & Raj.	H	Parwathaie	Asteraceae	A	5379
62	<i>Marrubium vulgare</i>	H	Khar botaie	Meliaceae	A	5380
63	<i>Malva parviflora</i> L.	H	Unknown	Malvaceae	A	5381
64	<i>Maytenus royleanus</i> (Wall. ex Lawson).	S	Jiral	Celastraceae	F	5382
65	<i>Melia azedarach</i> L.	T	Angrezi bakanra	Meliaceae	R	5383
66	<i>Mentha longifolia</i> L.	H	Welanaie	Lamiaceae	R	5384
67	<i>Monotheca buxifolia</i> (Falc.) A. DC.	T	Gurgura	Sapotaceae	R	5385
68	<i>Morus alba</i> L.	T	Spin thooth	Moraceae	R	5386
69	<i>Morus nigra</i> L.	T	Thoor thooth	Moraceae	R	5387
70	<i>Nannorrhops ritchiana</i> (Griff.) Aitch.	T	Mazaraie	Arecaceae	R	5388
71	<i>Nerium oleander</i> L.	S	Ganderaie	Apocynaceae	A	5389

72	<i>Nonea pulla</i> (L.) DC	H	Unknown	Boraginaceae	R	5390
73	<i>Olea ferruginea</i> Royle	T	Shwawan	Oleaceae	F	5391
74	<i>Otostegia limbata</i> (Benth.) Boiss.	S	Ghra Spelaghzaie	Lamiaceae	F	5392
75	<i>Oxalis corniculata</i> L.	H	Unknown	Oxalidaceae	A	5393
76	<i>Peganum harmala</i> L.	H	Spelanaie	Nitrariaceae	A	5394
77	<i>Periploca aphylla</i> Decne.	S	Barara	Apocynaceae	F	5395
78	<i>Periploca calophylla</i> (Wight) Falc.	S	Barara	Apocynaceae	F	5396
79	<i>Phlomis saterwartii</i> Hook. f.	S	Ghra podina	Lamiaceae	A	5397
80	<i>Phoenix dactylifera</i> L.	T	Khajora	Arecaceae	R	5398
81	<i>Pinus roxburghii</i> Sargent	T	Nakhtar	Pinaceae	R	5399
82	<i>Pistacia chinensis</i> Bunge.	T	Ghata shana	Anacardiaceae	R	5400
83	<i>Pistacia vera</i> L.	T	Shana	Anacardiaceae	R	5401
84	<i>Plantago ciliata</i> Desf.	H	Aspaghhol	Plantaginaceae	A	5402
85	<i>Plantago ovata</i> Frossk.	H	Aspeghol	Plantaginaceae	F	5403
86	<i>Polygala abyssinica</i> R. Br. ex Fresen.	H	Unknown	Polygalaceae	A	5404
87	<i>Polygala hobenackeriana</i> Fisch.	H	Unknown	Polygalaceae	A	5405
88	<i>Portulaca oleracea</i> L.	H	Warkharaie	Portulacaceae	F	5406
89	<i>Prosopis cineraria</i> (Linn.) Druce.	T	Dakaie	Mimosaceae	R	5407
90	<i>Prosopis juliflora</i> (Sw.) DC.	S	Kikraie	Mimosaceae	A	5408
91	<i>Prunus armeniaca</i> L.	T	Khurmanaie	Rosaceae	R	5409
92	<i>Punica granatum</i> L.	T	Anar	Punicaceae	R	5410
93	<i>Ranunculus arvensis</i> L.	H	Zer gulaie	Ranunculaceae	A	5411
94	<i>Rhazya stricta</i> Decne.	S	Ghanderaiie	Apocynaceae	F	5412
95	<i>Ricinus communis</i> L.	S	Arand	Euphorbiaceae	R	5413
96	<i>Saccharum bengalense</i> Retz.	H	kana, bara	Poaceae	A	5414
97	<i>Saccharum spontaeum</i> L.	H	Karaie	Poaceae	A	5415
98	<i>Salvadora oleoides</i> Decne.	T	Plaman	Salvadoraceae	F	5416
99	<i>Salvia santolinifolia</i> Boiss.	H	Aspaghhol	Lamiaceae	A	5417
100	<i>Saussurea heteromalla</i> (D.Don) Hand.	H	Kala zira	Asteraceae	F	5418
101	<i>Scrophularia striata</i> Boiss.	H	Machala	Scrophulariaceae	A	5419
102	<i>Scutellaria chamaedrifolia</i> Hedge & Paton.	H	Unknown	Lamiaceae	A	5420
103	<i>Sisymbrium irio</i> L.	H	Khredan	Brassicaceae	A	5421
104	<i>Solanum nigrum</i> L.	H	Malgebaie	Solanaceae	A	5422
105	<i>Solanum surattense</i> Burm. f.	H	Wara maraghoniye	Solanaceae	A	5423
106	<i>Sophora mollis</i> (Royle) Baker.	S	Zer gul botaie	Fabaceae	R	5424
107	<i>Tamarix aphylla</i> (L.) Lanza.	T	Ghaz	Tamaricaceae	R	5425
108	<i>Tecomella undulate</i> D. Don.	T	Wredan	Bignoniaceae	R	5426
109	<i>Teucrium stocksianum</i> Boiss.	H	Makanbotaie	Lamiaceae	R	5427
110	<i>Tribulus terrestris</i> L.	H	Maklindey	Zygophyllaceae	A	5428
111	<i>Trigonella monantha</i> C.A. Mey.	H	Unknown	Fabaceae	A	5429
112	<i>Tylophora tenerrima</i> Wight.	H	Ghra balanza	Apocynaceae	R	5430
113	<i>Vicia hirsuta</i> (L.) Gray.	H	Unknown	Fabaceae	R	5431
114	<i>Withania coagulans</i> (Stocks) Dunal.	S	Makhmazoora	Solanaceae	R	5432
115	<i>Withania somnifera</i> (L.) Dunal.	S	Shapianga	Solanaceae	R	5433
116	<i>Ziziphus jujuba</i> Mill.	T	Bira	Rhamnaceae	R	5434
117	<i>Ziziphus numularia</i> (Burm.f) W& A.	S	Kanrknra	Rhamnaceae	R	5435

Key: H- Habit, P-population, T-Tree, S-Shrubs, Herbs, A-Abundant, F-Frequent, R- Rare, V.no-voucher number