

Angiosperms in Changdhupoil union under Lalpur Upazila, Bangladesh: A preliminary inventory

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Abstract

The purpose of this work is to explore the flowering species of the study area and investigate the causes of annihilation in Changdhupoil union (The smallest local government units). The study has been carried out from January 2018 to December 2021 and traditional method was followed for the collection of plant specimen. A total of 442 species belonging to 338 genera and 91 families is enumerated. Among them 359 species are from Magnoliopsida and 83 are from Liliopsida. Asteraceae and Poaceae are the leading family of Magnoliopsida and Liliopsida respectively. Most of the plant species are native and are important for medicinal use. Plants of all habit such as herbs, shrubs, epiphytes, parasites, climbers and tree were found in this area and as usual herbs (45%) are found dominant followed by shrubs, trees and grasses. During this study, 59 wild species were found infrequent and 18 species were found rare in this study area. The study revealed that the area is floristically rich though some threats were identified and therefore recommend adequate measure for sustainable conservation of the biodiversity of this area.

Keywords: Floristic survey, Preliminary Assessment, Nature.

Introduction

Knowledge of botanical resources of an area can help to mark out a right strategy of its economic development. Exploration and documentation of the plants is very important to enrich about the botanical resources of specific area. It is also important aspect in the field of the plant taxonomy as well as for further scientific research. In Bangladesh, most of the floristic explorations are centered on forests or hilly areas. On the other hand, floristic explorations of non-forest like semi-urban or rural areas are very scanty. It is true that the forests or hilly areas are the harbor of many species but a good number of species are

also found in the non forest area such as villages, urbanized areas, and besides agricultural fields, railway tracks, roadsides, canal banks, garden, grooves and thicket. Geographically Lalpur upazila (Sub-district) is the hottest area of Bangladesh, climate is dry and annual rain fall is very low. Changdhupoil union is one of the ten unions of the Lalpur upazila in Natore district. The area of Changdhupoil union is 36.92 sq km, and located in between 24°2440385' and 24°2534466' north latitudes and in between 88°9000211' and 89°9748932' east longitudes. It is about 28 km south-west from district headquarter Natore (Fig 1) and the Northern part of Lalpur upazila.

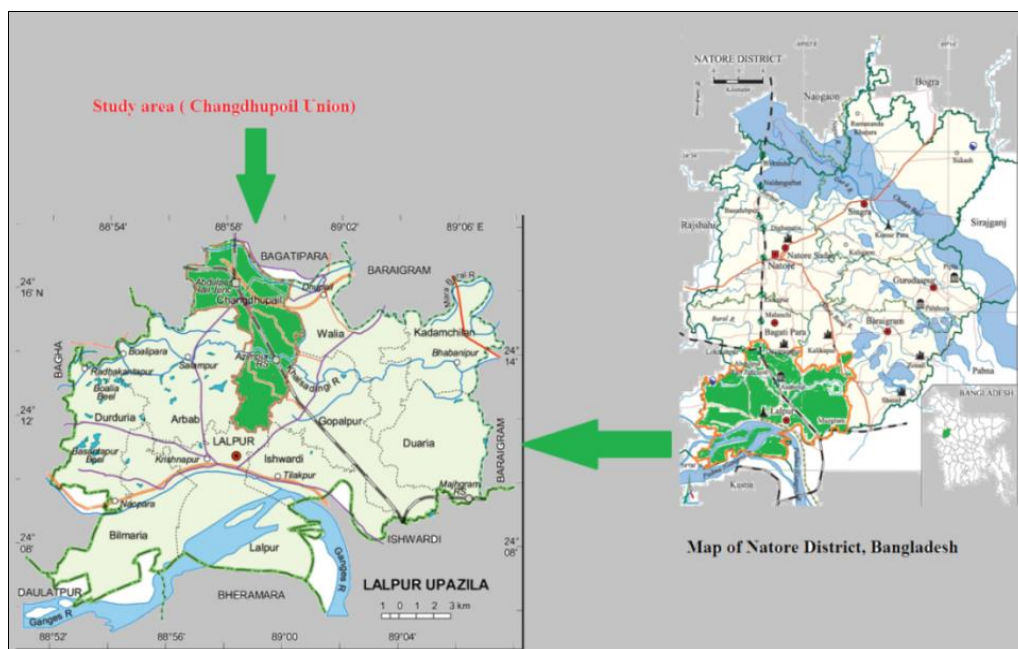


Fig 1: Map of the study area

(<https://www.google.com/maps/place/Changdhupoil/@24.2440385,88.9000211,21756m/data=!3m2!1e3!4b1!4m5!3m4!1s0x39fc1b64d2dad719:0xec9f99363a42118a!8m2!3d24.2534466!4d88.9748932>)

According to the national encyclopedia of Bangladesh named “Banglapedia” (https://en.banglapedia.org/index.php/Bangladesh_Soil) Chandhupoil union consists of mainly medium low plain land with calcareous dark grey floodplain soil. The study area is a semi urban to rural area and most of the lands are under cultivation of various types of crops and a little are covered by homestead vegetation, bamboo thicket and others. The importance of local floristic diversity study on the non-forest areas had already been realized and carried out in few districts or upazillas of Bangladesh by the researchers (Sarker *et al.*, 2013^[19]; Shetu *et al.*, 2018^[20]; Khanam *et al.*, 2020^[11]; Roy and Khan, 2020^[18]; Rahman, 2021)^[15]. From Natore district very little work so far has been done by the researcher such as Hasan *et al.*, (2013)^[7], Sultana and Rahman, (2017)^[23] and Hasan, (2020) focusing only medicinal plants species. Rhaman *et al.*, (2019) and Hasan and Uddin, (2024)^[22] had made floristic survey of Lalpur and Bagatipara of Natore respectively. The main objectives of the present study has to comprehensively explore the area, enumeration of the species, categorize according their abundance and status as well as identify their threats in Chandhupoil, Lalpur.

Methods and materials

The present work was the outcome of repeatedly visit at different corners of the study area in different seasons from January-2018 to December-2021 following traditional techniques. Specimens were identified with the help of Ahmed *et al.*, (2009)^[1, 2], Siddiqui *et al.*, (2017)^[21], Uddin and Hassan, (2018)^[25], relevant literature and different online flora (<http://www.efloras.org>). Both family and species names are mentioned according to “Plants of the World Online” (POWO) and family names are arranged alphabetically then species names of each family are arranged again alphabetically in this article. Local names are mentioned according to Pasha and Uddin, (2013)^[13] and Huq, (2019)^[10]. Exotic plant species have been determined by consulting Ahmed *et al.*, (2009)^[1, 2], Dutta *et al.*, (2015)^[5] and Uddin *et al.*, (2022)^[24]. Medicinal plant species have been determined by consulting Uddin *et al.*, (2022)^[24], Mitu *et al.*, (2022)^[12] and Rifat *et al.*, (2022)^[17]. Collected specimens were housed at the Department of Botany, Abdulpur Govt. College, Natore, Bangladesh.

Result and discussion

In the present study, a total of 442 angiosperm species (wild and cultivated) under 338 genera and 91 families have been identified and presented in table 1. Dicotyledons is represented by 359 species under 271 genera and 77 families while monocotyledons represented by 83 species under 63 genera and 14 families. In dicotyledons, Fabaceae is the largest family consisting 42 species and represented 9.61% of total collected specimen. Other major families of dicotyledons are Asteraceae (29), Acanthaceae (16), Malvaceae (16), Lamiaceae (16) and Euphorbiaceae (15). Poaceae appear as the largest family consisting 34 species in monocotyledons and the other major families are Cyperaceae (14) and Araceae (9). The largest genus in dicotyledons is *Solanum* of Solanaceae family bearing 7 species followed by *Ficus* of Moraceae Family bearing 6 species. In monocotyledons, *Cyperus* of Cyperaceae consist of 6 species followed by *Fimbristylis* of the same family consist of 4 species. During this survey, *Polypogon*

monosepalensis L. was rediscovered after 116 years (Sultana *et al.*, 2022)^[22]. Earlier Rahman *et al.*, (2019)^[16] had made five botanical expeditions covering all seasons and documented 216 species belonging to 72 families from whole Lalpur Upazila including this union. Alam *et al.*, (2006)^[3] reported 187 species belonging to 65 families from Ghagotia union under Kapasia Upzila in Gazipur district. Species of all habits of the species such as herbs, shrubs, tree, liana, vine, grass, epiphytic and parasites were found in this study area. Among them herbs representing 200 species and appear as a dominant which is 45% of total collection (Fig 2) while shrubs, tree and grass representing 21%, 13% and 10% respectively. Regarding to habitat (place of collection), the highest number of the species were collected from the road or railway side consisting species 111 which is 29% of total habitat (Fig 2). In this study area, railway side was found as the haven of many wild species than road side or others habitat it may be due to the railway side remain undisturbed for long time, comparatively higher and well-drained than cultivated land. The second and third highest habitat was fallow land (96) and homestead (56) respectively. Many herbaceous weeds are found in crop field (51) round the year with the seasonal cultivated crops especially in winter. Among the recorded plants, 26 species are cultivated for various purposes. Most of the tree and shrubs were found in homestead habitat where they had planted. These results revealed that the study area is rich in vegetation and suitable for floristic survey. But like other parts of the country, the species of this area are also in risk because of various anthropogenic activities.

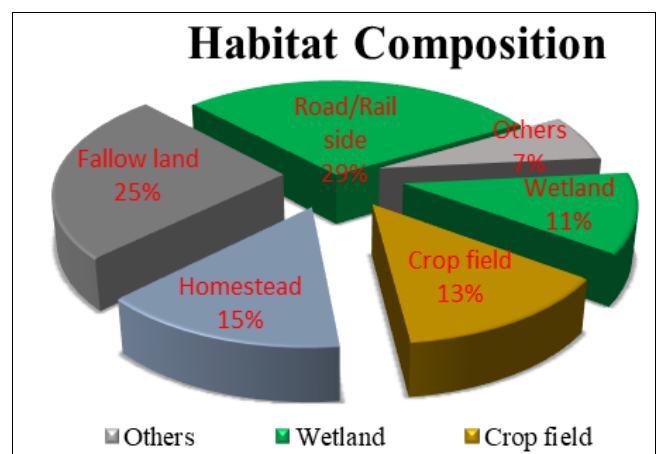
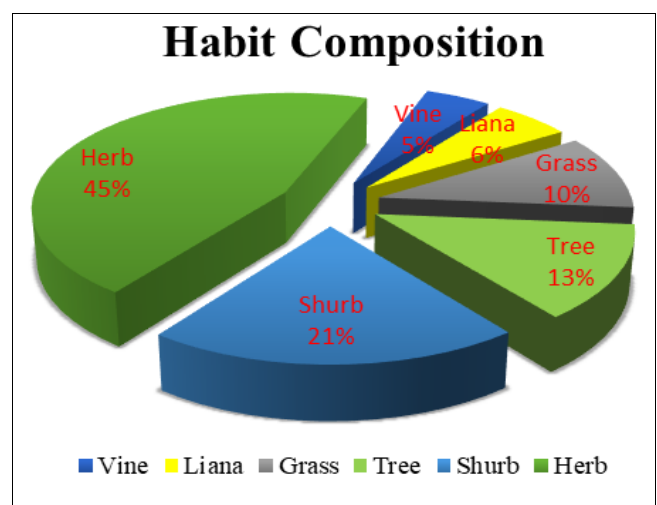


Fig 2 Habit and habitat composition

In this observation, some wild species such as *Abelmoschus moschatus*, *Alpinia nigra*, *Arachnothryx leucophylla*, *Bacopa monnieri*, *Barringtonia acutangula*, *Biophytum sensitivum*, *Campanula dimorphantha*, *Centaurium pulchellum*, *Clerodendrum chinense*, *Clerodendrum indicum*, *Coix lacryma-jobi*, *Curcuma zedoaria*, *Dendrocnide sinuata*, *Eleocharis geniculata*, *Erigeron sumatrensis*, *Fimbristylis quinquangularis*, *Fuirena ciliaris*, *Hemarthria compressa*, *Hygrophila ringens*, *Indigofera linifolia*, *Ipomoea triloba*, *Ixeris polycephala*, *Jatropha curcas*, *Jatropha gossypifolia*, *Laportea interrupta*, *Leea indica*, *Leptopetalum biflorum*, *Limnophila aromatica*, *Limnophila indica*, *Lindenbergia indica*, *Lobelia zeylanica*, *Melilotus indicus*, *Murdannia spirata*, *Orobanche aegyptiaca*, *Paederia foetida*, *Phaulopsis imbricata*, *Phyllanthus fraternus*, *Pogostemon benghalensis*,

Pogostemon quadrifolius, *Polygala chinensis*, *Polygonum monspeliensis*, *Rhynchosstylis retusa*, *Salix tetrasperma*, *Senecio tetrandrus*, *Setaria verticillata*, *Smithia sensitiva*, *Solanum erianthum*, *Spermacoce articularis*, *Spermacoce latifolia*, *Teramnus labialis*, *Trichosanthes costata*, *Turnera ulmifolia*, *Typhonium flagelliforme*, *Utricularia aurea*, *Utricularia stellaris*, *Verbascum coromandelianum*, *Veronica anagallis-aquatica*, *Wahlenbergia marginata* and *Zeuxine strateumatica* were found occasionally on the other hand eighteen species such as such as *Abrus precatorius*, *Albizia lucidior*, *Androsace umbellata*, *Clematis zeylanica*, *Crateva magna*, *Deeringia spicata*, *Justicia adhatoda*, *Justicia glauca*, *Leea macrophylla*, *Ludwigia octovalvis*, *Mallotus repandus*, *Meyna spinosa*, *Plumbago zeylanica*, *Rauwolfia serpentina*, *Senna alata*, *Vitex negund*, *Zingiber zerumbet* and *Ziziphus oenopolia* were found rare.

Table 1. Plant species of Changdhupoil Union under Lalpur Upazila of Natore, Bangladesh.

Botanical Name	Local Name	Habit	Habitat	Use	Origin	Status	RSE
Acanthaceae							
<i>Andrographis paniculata</i> (Burm.f.) Nees	Kalomegh	H, Er	Hs,Pl	M	Na	C	TH-553
<i>Barleria prionitis</i> L.	Kantajati	S	Rs	M	Na	C	TH-622
<i>Hygrophila auriculata</i> (Schumach.) Heine	Kulekhara	H, Ar	Wt	M	Na	VC	TH-1237
<i>Hygrophila polysperma</i> (Roxb.) T.Anderson	Alai kalai	H, Er	Wt	M	Na	VC	TH-1177
<i>Hygrophila ringens</i> (L.) R.Br. ex Spreng.	---	H, Er	Wt		Na	Oc	TH-563
<i>Justicia adhatoda</i> L.	Basak	S	Pl, Hs	M	Na	R	TH-1746
<i>Justicia gendarussa</i> Burm.f.	Jagatmadan	S	Pl	Fn, M	Na	VC	TH-63
<i>Justicia glauca</i> Rottler	---	S	Wt		Na	R	TH-558
<i>Nelsonia canescens</i> (Lam.) Spreng.	Paramul	H, Cp	Rs	M	Na	C	TH-669
<i>Phaulopsis imbricata</i> (Forssk.) Sweet	Kantasi	H	Rs	M	Na	Oc	TH-1316
<i>Rostellularia diffusa</i> (Willd.) Nees	Pitpapra	H, Er	Fl	M	Na	C	TH-1764
<i>Rostellularia procumbens</i> (L.) Nees	Chilpi basak	H	Cr		Na	C	TH-694
<i>Ruellia prostrata</i> Poir.	Posta booti	H	Rs		Na	VC	TH-635
<i>Ruellia tuberosa</i> L.	Chotpoty	H	Rs	M,O	Ex	VC	TH-328
<i>Rungia pectinata</i> (L.) Nees	Pindi	H, Cp	Fl	M	Ex	VC	TH-1192
<i>Strobilanthes hirta</i> (Vahl) Blume	Buripana	H, Cp	Fl	M	Na	VC	TH-205
Aizoaceae							
<i>Trianthema portulacastrum</i> L.	Gadabani	H	Fl	Veg		VC	TH-138
Amaranthaceae							
<i>Achyranthes aspera</i> L.	Apang	S, Er	Fl	M	Na	VC	TH-1069
<i>Alternanthera ficoidea</i> (L.) P. Beauv.	---	H, Cp	Rs	Fo, M	Ex	VC	TH-52
<i>Alternanthera paronychioides</i> A.St.-Hil.	Jhuli khata	H, Cp	Fl		Ex	VC	TH-260
<i>Alternanthera philoxeroides</i> (Mart.) Griseb.	Helcha	H,Er	Wt	Vg	Na	VC	TH-896
<i>Alternanthera sessilis</i> (L.) R.Br. ex DC.	Chanchi	H,Er	Cr	Vg	Na	VC	TH-48
<i>Amaranthus spinosus</i> L.	Kantanotey	H,Er	Fl	M,Vg	Na	VC	TH-505
<i>Amaranthus tricolor</i> L.	Lal shak	H,Er	Cl	Vg	Na	VC	TH-242
<i>Amaranthus viridis</i> L.	Notey	H,Er	Fl	Vg	Na	VC	TH-860
<i>Celosia argentea</i> L.	Morogphul	H,Er	Pl	M,O	Ex	C	TH-1210
<i>Chenopodium album</i> L.	Batuashak	H,Er	Cr	M,Vg	Na	VC	TH-608
<i>Deeringia spicata</i> (Thouars) Schinz	Sewt morogphul	H,Er	Lm	Vg	Na	R	TH-587
<i>Digera muricata</i> (L.) Mart.	Thanthonyshak	H,Er	Lm	Vg	Na	C	TH-312
<i>Ouret lanata</i> (L.) Kuntze	Chya	H	Rs		Na	VC	TH-538
Amaryllidaceae							
<i>Hymenocallis littoralis</i> (Jacq.) Salisb.	Upakallis	H	Sd			C	TH-174
<i>Zephyranthes rosea</i> Lindl.	Golapi ghaspul	H	Pl	O		C	TH-787
Anacardiaceae							
<i>Lannea coromandelica</i> (Houtt.) Merr.	Jiga	T	Lm	Fn	Na	VC	TH-1748
<i>Mangifera indica</i> L.	Aam	T	Pl	Fr, T	Na	VC	TH-73
<i>Spondias dulcis</i> Parkinson	Bilati amra	T	Pl, Hs	Fr	Ex	VC	TH-1766
Annonaceae							
<i>Annona reticulata</i> L.	Nona	T	Hs	Fr,Fw	Na	VC	TH-281
<i>Monoon longifolium</i> (Sonn.) B.Xue & R.M.K. Saunders	Debdaru	T	Pl	O,T	Ex	Oc	TH-1284
<i>Polyalthia suberosa</i> (Roxb.) Thwaites	Murmuri	S	Bt	Fr,M		C	TH-1350
Apiaceae							

▪ <i>Centella asiatica</i> (L.) Urb.	Thankuni	H, Cp	Fl	M, Vg		VC	TH-542
▪ <i>Coriandrum sativum</i> L.	Dhaniya	H	Cl	M, Sp		C	TH-1236
Apocynaceae							
▪ <i>Alstonia scholaris</i> (L.) R.Br.	Chattim	T	Hs	M	Na	C	TH-993
▪ <i>Calotropis gigantea</i> (L.) W.T.Aiton	Baro akand	S	Rs	Fb, M	Na	VC	TH-291
▪ <i>Carissa carandas</i> L.	Karamcha	S Ar	Hs,Pl	Fr, Pg	Na	C	TH-1714
▪ <i>Catharanthus roseus</i> (L.) G.Don	Nayantara	H,Er	Pl	M, O	Ex	VC	TH-400
▪ <i>Hemidesmus indicus</i> (L.) R.Br.	Anontomul	L	Rs	M	Na	C	TH-1744
▪ <i>Nerium oleander</i> L.	Karabi	S	Pl	O		C	TH-367
▪ <i>Pergularia daemia</i> (Forssk.) Chiov.	Dudhilata	L	Rs			VC	TH-1315
▪ <i>Rauvolfia serpentina</i> (L.) Benth. ex Kurz	Swarpagongha	H,Er	Bt	M	Na	R	TH-1763
▪ <i>Tabernaemontana divaricata</i> (L.) R.Br. ex Roem. & Schult.	Togarpul	S	Pl	M, O	Na	VC	TH-133
▪ <i>Telosma pallida</i> (Roxb.) Craib	Kanjilata	L	Rs	M	Na	C	TH-528
Araceae							
▪ <i>Alocasia formicata</i> (Kunth) Schott	Salukachu	H, Er	Bt	V, M	Na	VC	TH-1722
▪ <i>Alocasia macrorrhizos</i> (L.) G.Don	Mankachu	H, Er	Rs, Hs	M, Vg	Na	VC	TH-1723
▪ <i>Amorphophallus paeoniifolius</i> (Dennst.) Nicolson	Ol kachu	H	Hs	M, Vg		VC	TH-23
▪ <i>Colocasia esculenta</i> (L.) Schott	Mmukhikochu	H	Fl	M, Vg	Na	VC	TH-891
▪ <i>Lemna minor</i> L.	Sujipana	H, Ff	Aq	Fe	Na	VC	TH-784
▪ <i>Leucocasia gigantea</i> (Blume) Schott	Salad-kachu	H	Rs, Hs, Fl	M, Vg	Na	VC	TH-1750
▪ <i>Pistia stratiotes</i> L.	Topapana	H, Ff	Aq	M	Na	VC	TH-614
▪ <i>Spirodela polyrhiza</i> (L.) Schleid.	Guree pana	H, Ff	Aq	Fe, Mp		VC	TH-716
▪ <i>Typhonium flagelliforme</i> (G.Lodd.) Blume	Gechu	H	Fl	M	Na	Oc	TH-337
▪ <i>Typhonium trilobatum</i> (L.) Schott	Ghechu	H	Fl	M,vg	Na	VC	TH-280
Araliaceae							
▪ <i>Hydrocotyle sibthorpioides</i> Lam.	Kutithankuni	H, Cp	Fl		Na	C	TH-164
Arecaceae							
▪ <i>Areca catechu</i> L.	Supari	T	Pl	Ed, M	Ex	VC	TH-1724
▪ <i>Borassus flabellifer</i> L.	Tal	T	Hs, Rs	Fb, Ju	Na	VC	TH-1713
▪ <i>Cocos nucifera</i> L.	Narikel	T	Pl	Fw, Oi	Ex	VC	TH-1686
▪ <i>Phoenix sylvestris</i> (L.) Roxb.	Khajur	T	Pl	Hc, Ju	Na	VC	TH-1691
Asteraceae							
▪ <i>Acmella uliginosa</i> (Sw.) Cass.	Marhatitiga	H, Er	Cr		Ex	C	TH-41
▪ <i>Ageratum conyzoides</i> L.	Ochunti	H, Er	Fl	M	Ex	VC	TH-47
▪ <i>Blumea lacera</i> (Burm.f.) DC.	Kukurshinga	H, Er	Fl	M	Na	VC	TH-1371
▪ <i>Caesulia axillaris</i> Roxb.	Fuiltagas	H	Cr		Na	VC	TH-1150
▪ <i>Chromolaena odorata</i> (L.) R.M.King & H.Rob.	Assamlata	S	Rs	M	Ex	VC	TH-668
▪ <i>Cirsium arvense</i> (L.) Scop.	Shial kata	H	Rs		Na	VC	TH-1360
▪ <i>Cyanthillium cinereum</i> (L.) H.Rob.	Kukshim	H	Rs	M	Na	VC	TH-356
▪ <i>Eclipta prostrata</i> (L.) L.	Kesuti	H, Cp	Fl	M	Na	VC	TH-414
▪ <i>Emilia sonchifolia</i> (L.) DC.	Sadimudi	H, Er	Cr	M		C	TH-89
▪ <i>Erigeron sumatrensis</i> Retz.	---	H, Er	Rs			Oc	TH-364
▪ <i>Gamochoeta pensylvanica</i> (Willd.) Cabrera	Silvalomi	H, Er	Fl	M	Ex	C	TH-206
▪ <i>Gnaphalium polycaulon</i> Pers.	Kulakolmi	H, Er	Fl	M	Na	C	TH-213
▪ <i>Gnaphalium uliginosum</i> L.	---	H, Er	Fl			VC	TH-61
▪ <i>Grangea maderaspatana</i> (L.) Poir.	Nemuti	H, Cp	Cr	M	Na	VC	TH-580
▪ <i>Hemisteptia lyrata</i> (Bunge) Fisch. & C.A.Mey.	Saussurea	H, Er	Cr	M		C	TH-90
▪ <i>Ixeris polycephala</i> Cass.	Fala geris	H, Er	Cr		Na	Oc	TH-1225
▪ <i>Launaea asplenifolia</i> (Willd.) Hook.f.	Tikadana	H	Fl	M	Ex	C	TH-192
▪ <i>Mikania micrantha</i> Kunth	Asamlata	L	Rs	M	Ex	VC	TH-543
▪ <i>Parthenium hysterophorus</i> L.	Gajargas	H	Rs	M, Po	Ex	VC	TH-320
▪ <i>Pseudoconyza viscosa</i> (Mill.) D'Arcy	Coniza	H	Rs		Na	C	TH-1318
▪ <i>Pseudognaphalium luteoalbum</i> (L.) Hilliard & B.L.Burt	Barakamra	H	Cr	M	Na	VC	TH-215
▪ <i>Senecio tetrandrus</i> Buch.-Ham. ex Wall.	Batashi gas	H, Er	Cr			Oc	TH-1331
▪ <i>Sonchus asper</i> (L.) Hill	Sonpalong	H, Er	Rs, Cr		Na	C	TH-1378
▪ <i>Sphagneticola trilobata</i> (L.) Pruski	Latadeji	H, Cp	Fl	Fo, O	Ex	Oc	TH-607
▪ <i>Synedrella nodiflora</i> (L.) Gaertn.	Relanodi	H	Rs	M	Ex	C	TH-428
▪ <i>Tagetes erecta</i> L.	Gendaphul	H	Pl	M, O	Ex	C	TH-663
▪ <i>Tridax procumbens</i> L.	Tridhara	H	Rs	M	Na	VC	TH-1295
▪ <i>Xanthium strumarium</i> L.	Ghagra	S	Fl	M	Na	VC	TH-1148
▪ <i>Youngia japonica</i> (L.) DC.	Youngaful	H	Sd	M	Na	C	TH-54
Basellaceae							

▪ <i>Basella alba</i> L.	Puishak	H, Sc	Hs, Pl	Vg	Na	VC	TH-1726
Boraginaceae							
▪ <i>Cordia dichotoma</i> G.Forst.	Bohul	T	Rs, Hs	Gu, M	Na	C	TH-1731
▪ <i>Heliotropium indicum</i> L.	Hatishur	H,Er	Fl	M	Na	VC	TH-223
Brassicaceae							
▪ <i>Brassica napus</i> L.	Maghisarisha	H,Er	Cl	Oi	Ex	C	TH-562
▪ <i>Raphanus raphanistrum</i> subsp. <i>sativus</i> (L.) Domin	Mula	H,Er	Cl	Vg	Na	C	TH-1762
▪ <i>Rorippa indica</i> (L.) Hiern	Bansarisha	H	Rs	M	Na	C	TH-313
Campanulaceae							
▪ <i>Campanula dimorphantha</i> Schweinf.	Ghanti	H,Er	Lm		Na	Oc	TH-49
▪ <i>Lobelia zeylanica</i> L.	Cylon lobel	H	Wt	Ed		Oc	TH-1184
▪ <i>Wahlenbergia marginata</i> (Thunb.) A.DC.	Nak-phul	H	Cr		Na	Oc	TH-1279
Cannabaceae							
▪ <i>Trema orientale</i> (L.) Blume	Jiban	T	Hs	Fw	Na	VC	TH-1029
Cannaceae							
▪ <i>Canna indica</i> L.	Kalaboti	H,Er	Pl	M,O	Ex	C	TH-764
Capparaceae							
▪ <i>Capparis zeylanica</i> L.	Kalkera	L, Ar	Rs	Fr, M	Na	C	TH-1402
▪ <i>Crateva magna</i> (Lour.) DC.	Barun	T	Wt	Fw, M		R	TH-1343
Cariaceae							
▪ <i>Carica papaya</i> L.	Pepe	S, Ar	Pl, Hs	Fr, Vg	Na	VC	TH-399
Caryophyllaceae							
▪ <i>Stellaria media</i> (L.) Vill.	Sada fulki	H	Cr	M	Na	C	TH-597
Cleomaceae							
▪ <i>Cleome ruidosperma</i> DC.	Begunehurey	H,Er	Fl	M		VC	TH-1544
▪ <i>Cleome viscosa</i> L.	Holdehurey	H,Er	Cr	M	Na	VC	TH-508
Combretaceae							
▪ <i>Combretum indicum</i> (L.) DeFilipps	Modhumanjuri	L	Pl	M, O		C	TH-740
Commelinaceae							
▪ <i>Commelina benghalensis</i> L.	Kanshira	H, Cp	Fl	M	Na	VC	TH-437
▪ <i>Commelina diffusa</i> Burm.f.	Monayna kanshira	H, Cp	Fl	Fo	Na	VC	TH-845
▪ <i>Commelina paludosa</i> Blume	Jotakanchira	H, Cp	Bt		Na	C	TH-546
▪ <i>Cyanotis axillaris</i> (L.) D.Don ex Sweet	Axinot	H	Cr	Fo	Na	VC	TH-863
▪ <i>Murdannia nudiflora</i> (L.) Brenan	Kanduli	H	Wt	Fo	Na	VC	TH-453
▪ <i>Murdannia spirata</i> (L.) G.Brückn.	Shishir murdan	H	Wt			Oc	TH-1188
Convolvulaceae							
▪ <i>Argyrea argentea</i> (Roxb.) Sweet	Bararupatola	L	Rs		Na	C	TH-27
▪ <i>Cuscuta reflexa</i> Roxb.	Akashbel swarnalata	V,P	Ep	M	Ex	VC	TH-883
▪ <i>Evolvulus nummularius</i> (L.) L.	Bhuiokra	H, Cp	Fl	M, Sb	Na	VC	TH-343
▪ <i>Ipomoea aquatica</i> Forssk.	Kalsmi	V	Wt	Vg	Na	VC	TH-1057
▪ <i>Ipomoea carnea</i> Jacq.	Dhokalmi	S	Lm		Na	C	TH-1717
▪ <i>Ipomoea pes-tigridis</i> L.	Langulilata	V	Rs		Na	C	TH-978
▪ <i>Ipomoea triloba</i> L.	Gonti kalmi	V	Rs			Oc	TH-1141
▪ <i>Merremia hederacea</i> (Burm.f.) Hallier f.	Kaladana	V	Fl		Na	VC	TH-1017
▪ <i>Operculina turpethum</i> (L.) Silva Manso	Dudh kalmi	L	Rs		Na	C	TH-550
Costaceae							
▪ <i>Hellenia speciosa</i> (J.Koenig) S.R.Dutta	Kew mul	H	Rs	M	Na	C	TH-1743
Cucurbitaceae							
▪ <i>Benincasa hispida</i> (Thunb.) Cogn.	Chal kumra	V	Hs	Vg	Na	VC	TH-66
▪ <i>Coccinia grandiflora</i> Cogn. ex Engl.	Telakucha	L	Fl	M, Vg	Na	VC	TH-1016
▪ <i>Cucumis maderaspatanus</i> L.	Agmkhi	V	Rs	M	Na	VC	TH-448
▪ <i>Cucumis melo</i> L.	Kakri	V	Cr	Fr, Vg	Ex	VC	TH-253
▪ <i>Cucurbita maxima</i> Duchesne	Miste kumra	V	Hs	Vg	Na	VC	TH-100
▪ <i>Lagenaria siceraria</i> (Molina) Standl.	Lau	V	Hs	Vg	Na	VC	TH-299
▪ <i>Luffa aegyptiaca</i> Mill.	Dhundal	V	Pl	Vg	Na	VC	TH-415
▪ <i>Trichosanthes costata</i> Blume	Bati jhinga	V	Lm		Na	Oc	TH-488
▪ <i>Trichosanthes cucumerina</i> L.	Bon chichinga	V	Rs		Na	VC	TH-351
▪ <i>Trichosanthes dioica</i> Roxb.	Potol	L	Cl	Vg	Na	C	TH-1276
Cyperaceae							
▪ <i>Abildgaardia ovata</i> (Burm.f.) Kral	Marmaria fimbry	Gr,Er	Gl			C	TH-19
▪ <i>Cyperus brevifolius</i> (Rottb.) Hassk.	Shabujnirbisa	Gr, Er	Rs	Fo	Na	VC	TH-1681
▪ <i>Cyperus compressus</i> L.	Chhatidhoraghas i	H	Rs,	Fo	Na	VC	TH-1732
▪ <i>Cyperus difformis</i> L.	Behua ghasi	Gr, Er	Wt	Fo	Na	VC	TH-409
▪ <i>Cyperus iria</i> L.	Iri ghasi	Gr, Er	Wt	Fo, M	Na	C	TH-1503

▪ <i>Cyperus mindorensis</i> (Steud.) Huygh	Subasinirbisa	Gr, Er	Fl		Na	VC	TH-810
▪ <i>Cyperus rotundus</i> L.	Mutha	Gr, Er	Cr	M	Na	VC	TH-325
▪ <i>Eleocharis geniculata</i> (L.) Roem. & Schult.	Joraghasi	Gr	Wt			Oc	TH-920
▪ <i>Fimbristylis dichotoma</i> (L.) Vahl	Joyna chech	Gr	Gl	Fo		C	TH-773
▪ <i>Fimbristylis dipsacea</i> (Rottb.) C.B.Clarke	Dipsa fimbry	Gr	Wt	Fo	Na	C	TH-1463
▪ <i>Fimbristylis quinquangularis</i> (Vahl) Kunth	Panchkona fimbry	Gr	Wt	Fo		Oc	TH-21
▪ <i>Fimbristylis schoenoides</i> (Retz.) Vahl	Kesari malanga	Gr	Wt	Fo		C	TH-1639
▪ <i>Fuirena ciliaris</i> (L.) Roxb.	Poshmi ghasi	Gr	Gl			Oc	TH-1702
▪ <i>Schoenoplectiella juncoides</i> (Roxb.) Lye	Chechri	H	Wt		Na	VC	TH-1377
Dilleniaceae							
▪ <i>Dillenia indica</i> L.	Chalta	T	Rs, Pl	Fr, M	Na	C	TH-1715
Dioscoreaceae							
▪ <i>Dioscorea alata</i> L.	Chupri alu	V	Hs, Pl	Vg	Na	VC	TH-1735
▪ <i>Dioscorea pentaphylla</i> L.	Suar alu	V, Ar	Rs	M, Vg	Na	C	TH-1630
Ebenaceae							
▪ <i>Diospyros malabarica</i> (Desr.) Kostel.	Gab	T	Hs	Fr, M	Na	C	TH-377
▪ <i>Diospyros montan</i> Roxb.	Tomal	T	Hs	Fw, M	Na	C	TH-378
Elatinaceae							
▪ <i>Bergia ammannioides</i> Roxb.	Keshuriy	H, Er	Lm		Na	C	TH-167
Euphorbiaceae							
▪ <i>Acalypha indica</i> L.	Muktajhuri	H, Er	Fl	M	Na	VC	TH-435
▪ <i>Chrozophora rottleri</i> (Geiseler) Spreng.	Khudiphora	H, Er	Rs	M	Ex	VC	TH-1341
▪ <i>Codiaeum variegatum</i> (L.) Rumph. ex A.Juss.	Patabahar	S	Pl	O	Ex	VC	TH-1009
▪ <i>Croton bonplandianus</i> Baill.	Bankhira	S	Fl	M	Ex	VC	TH-232
▪ <i>Euphorbia hirta</i> L.	Dudhiya	H, Cp	Fl	M	Na	VC	TH-718
▪ <i>Euphorbia hypericifolia</i> L.	Jalsjardama	H, Er	Cr		Ex	VC	TH-781
▪ <i>Euphorbia prostrata</i> Aiton	Sijhori	H, Cp	Lm	M	Ex	VC	TH-293
▪ <i>Euphorbia tirucalli</i> L.	Lankasij	S	Pl			C	TH-1736
▪ <i>Euphorbia tithymaloides</i> L.	Berachita	S	Pl	M	Ex	C	TH-1382
▪ <i>Jatropha curcas</i> L.	Bagh verenda	S	Rs	Oi, Fn	Na	Oc	TH-1745
▪ <i>Jatropha gossypifolia</i> L.	Lal bherenda	S	Fl	M		Oc	TH-1669
▪ <i>Mallotus repandus</i> (Rottler) Müll.Arg.	Gunti	L	Rs	M		R	TH-366
▪ <i>Micrococca mercurialis</i> (L.) Benth.	Cocca	H	Rs			VC	TH-1072
▪ <i>Ricinus communis</i> L.	Rerhi	S	Hs	M, Oi	Ex	VC	TH-1319
▪ <i>Tragia involucrata</i> L.	Bichuti	V	Rs		Na	C	TH-431
Fabaceae							
▪ <i>Abrus precatorius</i> L.	Kunch	L	Bt	M		R	TH-1229
▪ <i>Acacia auriculiformis</i> A.Cunn. ex Benth.	Akashmoni	T	Pl	T	Ex	VC	TH-383
▪ <i>Albizia lebeck</i> (L.) Benth.	Sirish	T	Rs, Pl	T	Na	C	TH-1721
▪ <i>Albizia lucidior</i> (Steud.) I.C.Nielson ex H.Hara	Motor-koroi	T	Hs	T	Na	R	TH-1657
▪ <i>Alysicarpus vaginalis</i> (L.) DC.	Pannata	H, Cp	Fl			C	TH-1137
▪ <i>Bauhinia purpurea</i> L.	Debkanchan	T	Pl	M, O	Na	O	TH-1696
▪ <i>Brachypterum scandens</i> (Roxb.) Miq.	Noalata	L	Bt			C	TH-1728
▪ <i>Cajanus cajan</i> (L.) Huth	Arhhar	S	Rs, Pl	M, Pu	Na	C	TH-1729
▪ <i>Cassia fistula</i> L.	Bandarlathi	T	Pl	M, O	Na	C	TH-1668
▪ <i>Crotalaria pallida</i> Aiton	Jhunjhuni	S	Rs	Fb, M	Na	C	TH-1040
▪ <i>Dalbergia sissoo</i> Roxb. ex DC.	Sishookat	T	Rs	T	Ex	VC	TH-1733
▪ <i>Delonix regia</i> (Bojer ex Hook.) Raf.	Krishna chura	T	Rs, Pl	O	Ex	C	TH-1734
▪ <i>Erythrina variegata</i> L.	Mandar	T	Pl	Fn, M	Na	C	TH-1380
▪ <i>Grona triflora</i> (L.) H.Ohashi & K.Ohashi	Kodaliya	H, Cp	Fl, Lm	M	Na	VC	TH-856
▪ <i>Indigofera linifolia</i> (L.f.) Retz.	Bhangara	H, Cp	Rs			Oc	TH-295
▪ <i>Lablab purpureus</i> (L.) Sweet	Shim	V	Pl	Vg	Na	VC	TH-309
▪ <i>Lathyrus aphaca</i> L.	Jongli motor	H	Cr		Na	C	TH-656
▪ <i>Lathyrus oleraceus</i> Lam.	Motor	H	Cl		Ex	C	TH-654
▪ <i>Lathyrus sativus</i> L.	Kheshari	H	Cl		Ex	C	TH-175
▪ <i>Leucaena leucocephala</i> (Lam.) de Wit	Ipil-ipil	H	Pl	Fw, T	Ex	VC	TH-1631
▪ <i>Medicago lupulina</i> L.	Halude lupin	H, Cp	Lm		Ex	C	TH-160
▪ <i>Melilotus albus</i> Medik.	Sadamethi	H, Er	Cr		Na	VC	TH-95
▪ <i>Melilotus indicus</i> (L.) All.	Bonmethi	H, Er	Rs, Fl			Oc	TH-662
▪ <i>Mimosa pudica</i> L.	Lajjaboti	H	Rs, Fl	M	Na	C	TH-340
▪ <i>Pachyrhizus erosus</i> (L.) Urb.	Kesur	V	Hs, Rs	Ed, M	Ex	C	TH-1758
▪ <i>Pleurolobus gangeticus</i> (L.) J.St.-Hil. ex H.Ohashi & K.Ohashi	Salpani	S	Rs	M	Na	VC	TH-1021
▪ <i>Samanea saman</i> (Jacq.) Merr.	Fulkoroi	T	Pl	T, Sd	Ex	VC	TH-692
▪ <i>Senegalia catechu</i> (L.f.) P.J.H.Hurter & Mabb.	Khair	T	Pl	M, Tn	Na	C	TH-1765

▪ <i>Senna alata</i> (L.) Roxb.	Dadmardan	S	Wt	M	Ex	R	TH-888
▪ <i>Senna occidentalis</i> (L.) Link	Boro kalkasunda	S	Fl	M	Ex	C	TH-689
▪ <i>Senna siamea</i> (Lam.) H.S.Irwin & Barneby	Minjiri	T	Pl	Fw, O	Ex	C	TH-1637
▪ <i>Senna sophora</i> (L.) Roxb.	Kalkasunda	S	Fl	M	Na	C	TH-456
▪ <i>Senna tora</i> (L.) Roxb.	Chakunda	S	Rs	M	Na	C	TH-794
▪ <i>Sesbania cannabina</i> (Retz.) Poir.	Dhonchi	S	Cl	Fb, Gm	Na	C	TH-934
▪ <i>Smithia sensitiva</i> Aiton	Lalkapina	H	Fl			Oc	TH-1189
▪ <i>Tamarindus indica</i> L.	Tentul	T	Pl, Hs, Rs	Fr, T	Ex	VC	TH-1768
▪ <i>Teramnus labialis</i> (L.f.) Spreng.	Mashani	V	Rs			Oc	TH-1275
▪ <i>Vachellia nilotica</i> (L.) P.J.H.Hurter & Mabb.	Babla	T	Rs	Gu, M	Na	C	TH-1641
▪ <i>Vicia faba</i> L.	Barasim	H, Er	Cl		Ex	C	TH-1770
▪ <i>Vicia hirsuta</i> (L.) Gray	Masrchana	H	Cr	Fo, M	Na	C	TH-665
▪ <i>Vicia lens</i> (L.) Coss. & Germ.	Masur	H	Cl	Pu, Fo		C	TH-641
▪ <i>Vicia sativa</i> L.	Ankari	H	Cr	Pu, Fo	Ex	C	TH-144
▪ <i>Vigna mungo</i> (L.) Hepper	Maskalay	H	Cl	Pu, Fo	Na	C	TH-1001
▪ <i>Vigna radiata</i> (L.) R.Wilczek	Sona muog	H	Cl	Pu, Fo		C	TH-1007
Gentianaceae							
▪ <i>Centaurium pulchellum</i> (Sw.) Hayek ex Hand.-Mazz., Stadlm., Janch. & Faltis	---	H, Er	Fl	-		Oc	TH-10
Hydrocharitaceae							
▪ <i>Ottelia alismoides</i> (L.) Pers.	Panicola	H, An	Aq	Vg	Na	C	TH-1719
Hydroleaceae							
▪ <i>Hydrolea zeylanica</i> (L.) Vahl	Kasschara	H, Er	Wt	M		C	TH-254
Lamiaceae							
▪ <i>Anisomeles indica</i> (L.) Kuntze	Gobura	S	Rs	M	Na	VC	TH-1010
▪ <i>Clerodendrum chinense</i> (Osbeck) Mabb.	Hazari beli	S	Hs			Oc	TH-933
▪ <i>Clerodendrum indicum</i> (L.) Kuntze	Bamunhati	S	Fl	M	Na	Oc	TH-181
▪ <i>Clerodendrum infortunatum</i> L.	Bhant	S	Rs	M	Na	VC	TH-190
▪ <i>Coleus scutellarioides</i> (L.) Benth.	Pathor-chur	S	Pl	O		Oc	TH-1108
▪ <i>Leonurus sibiricus</i> L.	Raktodrone	H	Fl	M	Na	VC	TH-561
▪ <i>Leucas aspera</i> (Willd.) Link	Shetodron	H	Fl			VC	TH-227
▪ <i>Leucas lavandulifolia</i> Sm.	Shetodron	H	Fl		Na	VC	TH-255
▪ <i>Mesosphaerum suaveolens</i> (L.) Kuntze	Tokma	S	Rs	M	Na	C	TH-31
▪ <i>Ocimum americanum</i> L.	Bontulsi	H	Fl		Na	C	TH-1718
▪ <i>Ocimum tenuiflorum</i> L.	Kalotulsi	S	Pl	M	Na	VC	TH-34
▪ <i>Pogostemon benghalensis</i> (Burm.f.) Kuntze	Pacholi	S	Rs	M	Na	Oc	TH-647
▪ <i>Pogostemon quadrifolius</i> (Roxb. ex D.Don) F.Muell.	Konapachuli	H, Er	Cr			Oc	TH-650
▪ <i>Salvia plebeia</i> R.Br.	Bhuitulsi	H	Fl		Na	VC	TH-4
▪ <i>Tectona grandis</i> L.f.	Segun	T	Pl, Hs	T	Ex	C	TH-1769
▪ <i>Vitex negundo</i> L.	Nishinda	S	Hs	M	Na	R	TH-1462
Lecythydaceae							
▪ <i>Barringtonia acutangula</i> (L.) Gaertn.	Hijal	T	Wt		Na	Oc	TH-389
Lentibulariaceae							
▪ <i>Utricularia aurea</i> Lour.	Jhangi	H, Sm	Wt		Na	Oc	TH-1693
▪ <i>Utricularia stellaris</i> L.f.	Jhangi	H, Sm	Wt			Oc	TH-1568
Linaceae							
▪ <i>Linum usitatissimum</i> L.	Tisi	H	Cl			C	TH-731
Linderniaceae							
▪ <i>Bonnaya antipoda</i> (L.) Druce	Sada pani ghas	H, Er	Cr	M	Na	VC	TH-391
▪ <i>Bonnaya ciliata</i> (Colsm.) Spreng.	Vui neem	H, Er	Cr	M	Na	C	TH-392
▪ <i>Lindernia dubia</i> (L.) Pennell	---	H	Fl			C	TH-1412
▪ <i>Lindernia rotundifolia</i> (L.) Alston	Tan chapra	H	Wt	M		VC	TH-16
▪ <i>Torenia crustacea</i> (L.) Cham. & Schltldl.	Chapra ghas	H	Fl	M	Na	VC	TH-829
Loranthaceae							
▪ <i>Dendrophthoe falcata</i> (L.f.) Ettingsh.	Bandha	S, P	Ep	M	Na	VC	TH-620
▪ <i>Macrosolen cochinchinensis</i> (Lour.) Tiegh.	Chota banda	S, P	Ep	M	Na	VC	TH-950
▪ <i>Scurrula pulverulenta</i> (Wall.) G.Don	Palascu	S, P	Ep			C	TH-821
Lythraceae							
▪ <i>Ammannia baccifera</i> L.	Dadmari	H, Er	Cr	M	Na	VC	TH-957
▪ <i>Ammannia multiflora</i> Roxb.	Niamul	H, Er	Cr			C	TH-960
▪ <i>Cuphea hyssopifolia</i> Kunth	Kuphea	S	Pl	O	Ex	Oc	TH-710
▪ <i>Lawsonia inermis</i> L.	Mehedi	S	Pl	Dy, M	Na	VC	TH-1530
▪ <i>Punica granatum</i> L.	Dalim	T	Pl	Dy, Fr	Na	VC	TH-774
Malvaceae							
▪ <i>Abelmoschus esculentus</i> (L.) Moench	Dheros	S, Er	Cl	Vg	Na	C	TH-344
▪ <i>Abelmoschus moschatus</i> Medik.	Mushakdana	S, Er	Fl, Rs	M		Oc	TH-536
▪ <i>Abroma augustum</i> (L.) L.f.	Ulatkambol	S, Er	Hs	Fb, M		C	TH-432

▪ <i>Abutilon indicum</i> (L.) Sweet	Jhumka	S, Er	Fl, Rs	M	Na	VC	TH-1168
▪ <i>Bombax ceiba</i> L.	Simul	T	Hs,Bt,Rs	Fb, M	Ex	VC	TH-1727
▪ <i>Corchorus aestuans</i> L.	Janglipat	H	Fl	Fb, M	Na	C	TH-918
▪ <i>Corchorus olitorius</i> L.	Toshapat	S	Cl	Fb, Vg		C	TH-887
▪ <i>Gossypium herbaceum</i> L.	Karpas	S	Cl			Oc	TH-908
▪ <i>Hibiscus rosa-sinensis</i> L.	Joba	S	Pl	O	Ex	VC	TH-251
▪ <i>Pentapetes phoenicea</i> L.	Dupurmondi	S	Hs	M, O	Na	C	TH-369
▪ <i>Sida acuta</i> Burm.f.	Kureta	S	Rs	M	Na	C	TH-512
▪ <i>Sida cordata</i> (Burm.f.) Borss.Waalk.	Pitberela	S	Rs	M	Na	VC	TH-923
▪ <i>Sida rhombifolia</i> L.	Lalberela	S	Rs	Fb, M	Na	VC	TH-927
▪ <i>Triumfetta rhomboidea</i> Jacq.	Bonokra	S	Rs	Fb, M	Ex	C	TH-1032
▪ <i>Urena lobata</i> L.	Banokra	S	Rs	Fb, M	Na	C	TH-941
Mazaceae							
▪ <i>Mazus pumilus</i> (Burm.f.) Steenis	Tutra	H	Cr	M	Na	VC	TH-94
Meliaceae							
▪ <i>Aphanamixis polystachya</i> (Wall.) R.Parker	Pitraj	T	Hs	M, Oi	Na	C	TH-1661
▪ <i>Azadirachta indica</i> A.Juss.	Nim	T	Pl	M, T	Na	VC	TH-1649
▪ <i>Khaya anthotheca</i> (Welw.) C.DC.	Lombu	T	Pl, Rs	T	Ex	C	TH-1747
▪ <i>Melia azedarach</i> L.	Ghoranim	T	Pl	T, M	Ex	C	TH-1754
▪ <i>Swietenia macrophylla</i> King	Bara mehogani	T	Pl	T	Ex	VC	TH-1650
▪ <i>Toona ciliata</i>	Toon	T	Hs	M, T	Na	VC	TH-1740
Menispermaceae							
▪ <i>Cocculus hirsutus</i> (L.) W.Theob.	Jaljamani	L	Rs		Na	C	TH-1415
▪ <i>Stephania japonica</i> (Thunb.) Miers	Nimuka	L	Rs	M	Na	VC	TH-936
▪ <i>Tiliacora acuminata</i> (Lam.) Miers	Tiliacora	L	Rs	M	Na	C	TH-690
Menyanthaceae							
▪ <i>Nymphoides hydrophylla</i> (Lour.) Kuntze	Chandmala	H, An	Aq	M	Na	VC	TH-181
Molluginaceae							
▪ <i>Glinus oppositifolius</i> (L.) Aug.DC.	Gima sak	H, Cp	Fl	Vg	Na	C	TH-724
Moraceae							
▪ <i>Artocarpus heterophyllus</i> Lam.	Kanthal	T	Pl, Hs	Fr, T	Na	VC	TH-1725
▪ <i>Ficus benghalensis</i> L.	Bot	T	Rs, Pl	Fw, Sd	Na	C	TH-1737
▪ <i>Ficus heterophylla</i> L.F.	Bhui dumur	S, Sc	Rs	Fw, M	Na	C	TH-155
▪ <i>Ficus hispida</i> L.f.	Kak dumur	S	Rs,	M, Vg	Na	VC	TH-1738
▪ <i>Ficus racemosa</i> L.	Jag dumur	T	Rs	Fr, M	Na	C	TH-626
▪ <i>Ficus religiosa</i> L.	Assawath	T	Rs	O, Sd	Na	VC	TH-627
▪ <i>Ficus rumphii</i> Blume	Gai assawath	S	Rs	O, Sd	Na	C	TH-1739
▪ <i>Streblus asper</i> Lour.	Shaora	T	Hs	Fw, M	Na	C	TH-1273
Moringaceae							
▪ <i>Moringa oleifera</i> Lam.	Sajna	T	Hs, Pl	M, Vg	Ex	VC	TH-1755
Musaceae							
▪ <i>Musa × paradisiaca</i> L.	Kola	H	Hs,Pl	Fr, Vg	Na	VC	TH-1756
Myrtaceae							
▪ <i>Eucalyptus camaldulensis</i> Dehnh.	Duli eucalyptus	T	Pl	T, O	Ex	VC	TH-1563
▪ <i>Psidium guajava</i> L.	Peyara	T	Pl	Fr, M	Ex	VC	TH-730
▪ <i>Syzygium cumini</i> (L.) Skeels	Jam	T	Pl,Hs,Rs	Fr, T	Na	C	TH-1767
Nyctaginaceae							
▪ <i>Boerhavia diffusa</i> L.	Punarnava	H, Cp	Fl	M	Na	VC	TH-490
▪ <i>Bougainvillea glabra</i> Choisy	Baganbilas	L, Ar	Pl	O	Ex	Oc	TH-349
▪ <i>Mirabilis jalapa</i> L.	Sondhamaloti	H	Pl	M, O	Ex	C	TH-752
Nymphaeaceae							
▪ <i>Nymphaea nouchali</i> Burm.f.	Shapla	H, An	Aq	M, O	Na	VC	TH-800
▪ <i>Nymphaea pubescens</i> Willd.	Shaluk	H, An	Aq	O, Vg	Na	VC	TH-1597
Oleaceae							
▪ <i>Jasminum sambac</i> (L.) Aiton	Beli	L	Rs	O	Na	VC	TH-457
▪ <i>Nyctanthes arbor-tristis</i> L.	Sheuli	S	Pl	M,O	Ex	Oc	TH-815
Onagraceae							
▪ <i>Ludwigia adscendens</i> (L.) H.Hara	Keshordam	H	Wt	M	Na	VC	TH-1753
▪ <i>Ludwigia hyssopifolia</i> (G.Don) Exell	Panilong	H	Wt	M	Na	VC	TH-445
▪ <i>Ludwigia octovalvis</i> (Jacq.) P.H.Raven	Bhuikura	H	Wt		Na	R	TH-1688
▪ <i>Ludwigia prostrata</i> Roxb.	Shayankura	H	Wt	M	Na	C	TH-446
Orchidaceae							
▪ <i>Rhynchostylis retusa</i> (L.) Blume	Shial leza orchid			M,O		Oc	TH-1742
▪ <i>Vanda tessellata</i> (Roxb.) Hook. ex G.Don	Tessi rasna	H	Ep	M	Na	VC	TH-240
▪ <i>Zeuxine strateumatica</i> (L.) Schltr.	Shwet-huli	H	Gl			Oc	TH-71
Orobanchaceae							
▪ <i>Lindenbergia indica</i> (L.) Vatke	Basonti	H	Br			Oc	TH-69
▪ <i>Orobanche aegyptiaca</i> Pers.	Sorishabanda	H,P	Ep			Oc	TH-1367

Oxalidaceae							
▪ <i>Averrhoa carambola</i> L.	Kamranga	T	Pl	Fr	Ex	VC	TH-901
▪ <i>Biophytum sensitivum</i> (L.) DC.	Bannaringa	H,Er	Cr			Oc	TH-362
▪ <i>Oxalis corniculata</i> L.	Amrul	H, Cp	Fl	M, Vg	Na	VC	TH-572
Papaveraceae							
▪ <i>Argemone mexicana</i> L.	Shialkanta	H,Er	Fl	M	Ex	VC	TH-1388
▪ <i>Fumaria parviflora</i> Lam.	Bonsalpa	H,Er	Cr			C	TH-578
Passifloraceae							
▪ <i>Passiflora suberosa</i> L.	Mela jhumka	V	Rs		Ex	C	TH-1599
▪ <i>Turnera ulmifolia</i> L.	Turan	S	Pl			Oc	TH-760
Pedaliaceae							
▪ <i>Sesamum indicum</i> L.	Til	S	Cl	Oi	Na	C	TH-336
Phyllanthaceae							
▪ <i>Breynia vitis-idaea</i> (Burm.f.) C.E.C.Fisch.	Vita salpoti	S	Rs	M	Na	C	TH-394
▪ <i>Phyllanthus amarus</i> Schumach. & Thonn.	Vuiamla	H	Fl	M	Na	VC	TH-271
▪ <i>Phyllanthus fraternus</i> G.L.Webster	Vuiamla	H	Fl, Cr	M	Ex	Oc	TH-1741
▪ <i>Phyllanthus reticulatus</i> Poir.	Panjuli	S	Wt	Fu, M	Na	VC	TH-660
▪ <i>Phyllanthus urinaria</i> L.	Hajarmoni	H	Fl	M	Na	VC	TH-1590
▪ <i>Phyllanthus virgatus</i> G.Forst.	Chhitki	H	Fl		Na	C	TH-305
Piperaceae							
▪ <i>Peperomia pellucida</i> (L.) Kunth	Luchipata	H	Br	M		C	TH-770
▪ <i>Piper longum</i> L.	Pepul	V	Rs	M	Na	C	TH-516
Plantaginaceae							
▪ <i>Bacopa monnieri</i> (L.) Wettst.	Brahmishak	H, Cp	Wt	M		Oc	TH-388
▪ <i>Limnophila aromatica</i> (Lam.) Merr.	Pani karpur	H, An	Wt	M		Oc	TH-1179
▪ <i>Limnophila indica</i> (L.) Druce	Deshi karpur	H, Er	Wt	M		Oc	TH-1238
▪ <i>Mecardonia procumbens</i> (Mill.) Small	Mikardan	H, Cp	Lm	M	Ex	VC	TH-158
▪ <i>Scoparia dulcis</i> L.	Bandhoney	H	Fl	M	Na	VC	TH-129
▪ <i>Veronica anagallis-aquatica</i> L.	Paniveronti	H	Wt		Na	Oc	TH-486
Plumbaginaceae							
▪ <i>Plumbago zeylanica</i> L.	Chita	S	Rs			R	TH-606
Poaceae							
▪ <i>Apluda mutica</i> L.	Matika	Gr	Rs		Na	C	TH-527
▪ <i>Axonopus compressus</i> (Sw.) P.Beauv.	Carpet ghas	Gr	Gl	Fo	Na	C	TH-548
▪ <i>Bambusa balcooa</i> Roxb.	Borakbash	Gr	Bt	Bc	Na	C	TH-375
▪ <i>Bambusa tulda</i> Roxb.	Tollabash	Gr	Bt	Bc	Na	C	TH-513
▪ <i>Cenchrus purpureus</i> (Schumach.) Morrone	Napier gas	Gr	Cl	Fo	Ex	C	TH-537
▪ <i>Chrysopogon aciculatus</i> (Retz.) Trin.	Chorkata	Gr	Gl	Hc		C	TH-921
▪ <i>Chrysopogon zizanioides</i> (L.) Roberty	Benamul	Gr	Wt	Hc,Sb		C	TH-1527
▪ <i>Coix lacryma-jobi</i> L.	Tojbi	Gr, Er	Wt	Ed,Fo		Oc	TH-403
▪ <i>Cynodon dactylon</i> (L.) Pers.	Durbaghass	Gr, Cp	Gl	Fo,Sb	Na	VC	TH-86
▪ <i>Dactyloctenium aegyptium</i> (L.) Willd.	Makra	Gr, Cp	Gl	Sb	Na	VC	TH-705
▪ <i>Dichanthium annulatum</i> (Forssk.) Stapf	Loari	Gr, Er	Gl		Na	VC	TH-201
▪ <i>Digitaria setigera</i> Roth	Sheti ghas	Gr, Er	Cr		Na	C	TH-246
▪ <i>Echinochloa colonum</i> (L.) Link	Shama gash	Gr, Er	Cr	Fo	Na	VC	TH-1390
▪ <i>Echinochloa crus-galli</i> (L.) P.Beauv.	Bara shama gash	Gr, Er	Cr	Fo,M	Na	VC	TH-1398
▪ <i>Eleusine indica</i> (L.) Gaertn.	Chapra	Gr	Gl	Sb	Na	VC	TH-682
▪ <i>Eragrostis tenella</i> (L.) P.Beauv. ex Roem. & Schult.	Koni ghas	Gr	Gl	Fo	Na	C	TH-875
▪ <i>Hemarthria compressa</i> (L.f.) R.Br.	Kom choila ghas	Gr	Gl			Oc	TH-487
▪ <i>Imperata cylindrica</i> (L.) P.Beauv.	Ulukhor	Gr	Gl	Fo, Hc	Na	VC	TH-684
▪ <i>Leersia hexandra</i> Sw.	Fulka ghas	Gr	Wt	Fo		VC	TH-1144
▪ <i>Leptochloa panicea</i> (Retz.) Ohwi	Mona ghas	Gr	Wt	Fo	Na	C	TH-911
▪ <i>Oplismenus burmanni</i> (Retz.) P.Beauv.	Jabri durba	Gr	Sd	Fo	Na	VC	TH-1077
▪ <i>Oplismenus compositus</i> (L.) P.Beauv.	Gohur durba	Gr	Sd	Fo,M	Na	VC	TH-1097
▪ <i>Oryza sativa</i> L.	Dhan	Gr	Cl	Ed,Fo	Na	VC	TH-748
▪ <i>Panicum repens</i> L.	Baranda ghas	Gr	Gl	Fo	Na	C	TH-418
▪ <i>Paspalum distichum</i> L.	Gitla ghas	Gr	Gl		Na	C	TH-302
▪ <i>Polypogon monspeliensis</i> (L.) Desf.	Indurpaya ghas	Gr	Cr	-	Na	Oc	TH-1
▪ <i>Saccharum officinarum</i> L.	Akh	Gr	Cl	Fo	Ex	VC	TH-1324
▪ <i>Saccharum spontaneum</i> L.	Kash	Gr	Fl	Fo,Sb	Na	VC	TH-1587
▪ <i>Setaria flavida</i> (Retz.) Veldkamp	Bolaymandi ghas	Gr	Rs	Fo	Na	C	TH-360
▪ <i>Setaria verticillata</i> (L.) P.Beauv.	Dorabiari	Gr	Fl		Na	Oc	TH-1329
▪ <i>Sporobolus diandrus</i> (Retz.) P.Beauv.	Benaoni ghas	Gr	Rs	Fo		VC	TH-29
▪ <i>Triticum aestivum</i> L.	Gom	Gr	Cl		Na	VC	TH-142
▪ <i>Urochloa mutica</i> (Forssk.) T.Q.Nguyen	Para ghas	Gr	Rs			C	TH-1278
▪ <i>Urochloa reptans</i> (L.) Stapf	Peraghas	Gr	Rs	Fo	Na	C	TH-1624
Polygalaceae							

▪ <i>Polygala chinensis</i> L.	Chinadudhi	H	Fl			Oc	TH-25
Polygonaceae							
▪ <i>Persicaria barbata</i> (L.) H.Hara	Bishkatali	H	Wt	M	Na	C	TH-42
▪ <i>Persicaria orientalis</i> (L.) Spach	Bara panimarich	S	Wt	M	Na	VC	TH-462
▪ <i>Polygonum effusum</i> Meisn.	Raniphul	H, Cp	Cr		Na	VC	TH-98
▪ <i>Rumex maritimus</i> L.	Gangapalong	H	Wt	M	Na	VC	TH-114
Pontederiaceae							
▪ <i>Pontederia crassipes</i> Mart.	Kochuripana	H, Ef	Wt	Fo	Ex	VC	TH-1759
▪ <i>Pontederia hastata</i> L.	Bara nukha	H	Wt	M	Na	C	TH-425
Portulacaceae							
▪ <i>Portulaca grandiflora</i> Hook.	Time phul	H, Cp	Pl	O	Ex	Oc	TH-1760
▪ <i>Portulaca oleracea</i> L.,	Boronunia	H	Rs	M, Vg	Na	VC	TH-361
▪ <i>Portulaca quadrifida</i> L.	Chhota nunia	H, Cp	Fl	O, Vg	Na	VC	TH-1307
▪ <i>Portulaca umbraticola</i> Kunth	Ghasphul	H, Cp	Pl	O	Ex	Oc	TH-1761
Primulaceae							
▪ <i>Androsace umbellata</i> (Lour.) Merr.	Satrojaki	H, Er	Sd		Na	R	TH-1270
▪ <i>Lysimachia arvensis</i> (L.) U.Manns & Anderb.	Pakhichosha	H	Cr		Ex	C	TH-92
Putranjivaceae							
▪ <i>Putranjiva roxburghii</i> Wall.	Ghornifol	T	Hs	M, T	Na	C	TH-372
Ranunculaceae							
▪ <i>Clematis zeylanica</i> (L.) Poir.	Chagolboti	L	Rs	M	Na	R	TH-1036
▪ <i>Nigella sativa</i> L.	Kalajira	H	Cl		Ex	C	TH-1292
Rhamnaceae							
▪ <i>Ziziphus mauritiana</i> Lam.	Boroi	T, Ar	Hs	Fr, fw	Na	C	TH-1080
▪ <i>Ziziphus oenopolia</i> (L.) Mill.	Ban boroi	S, Ar	Rs	Fu, M	Na	R	TH-1043
Rosaceae							
▪ <i>Rosa × centifolia</i> L.	Golap	S	Pl	M, O		C	TH-58
Rubiaceae							
▪ <i>Arachnothryx leucophylla</i> (Kunth) Planch.	Panama Rose	S	Pl		Ex	Oc	TH-1128
▪ <i>Dentella repens</i> (L.) J.R.Forst. & G.Forst.	Bhuipat	H, Cp	Fl	M	Na	VC	TH-507
▪ <i>Dentella repens</i> var. <i>serpyllifolia</i> (Wall. ex Craib) Verdc.	Sharpil bhuipat	H, Cp	Fl		Na	C	TH-1777
▪ <i>Ixora coccinea</i>	Rangan	S	Pl	O	Na	VC	TH-1261
▪ <i>Leptopetalum biflorum</i> (L.) Neupane & N.Wikstr.	Lora papra	H	Fl		Na	Oc	TH-549
▪ <i>Meyna spinosa</i> Roxb.ex Link	Katai	S, Ar	Rs	M	Na	R	TH-1041
▪ <i>Neolamarckia cadamba</i> (Roxb.) Bosser	Kadam	T	Hs, Rs, Fl	O, T	Ex	VC	TH-1757
▪ <i>Oldenlandia corymbosa</i> L.	Khet papra	H	Fl	M	Na	VC	TH-460
▪ <i>Paederia foetida</i> L.	Gandhabhaduli	L	Rs	M		Oc	TH-541
▪ <i>Scleromitron diffusum</i> (Willd.) R.J.Wang	Fussa papra	H	Fl	M		C	TH-522
▪ <i>Spermacoce articularis</i> L.f.	Atharogia	H	Rs	M	Na	Oc	TH-472
▪ <i>Spermacoce latifolia</i> Aubl.	Ghujil	H	Rs			Oc	TH-307
Rutaceae							
▪ <i>Aegle marmelos</i> (L.) Corrêa	Bel	T	Pl	Fr, M	Na	VC	TH-1653
▪ <i>Citrus × aurantiifolia</i> (Christm.) Swingle	Kaggilebu	S, Ar	Pl	Fr		C	TH-771
▪ <i>Citrus maxima</i> (Burm.) Merr.	Batabilebu	S	Hs, Pl	Fr	Ex	C	TH-1730
▪ <i>Glycosmis pentaphylla</i> (Retz.) DC.	Ashaora	S	Rs	Fu, M	Na	VC	TH-514
▪ <i>Limonia acidissima</i> L.	Koethbel	T	Hs	Fr	Na	C	TH-1751
▪ <i>Murraya koenigii</i> (L.) Spreng.	Borosunga	S	Pl	M, Sp	Na	C	TH-1193
▪ <i>Murraya paniculata</i> (L.) Jack	Kamini	S	Pl	M, O	Na	C	TH-1772
Salicaceae							
▪ <i>Flacourtia indica</i> (Burm.f.) Merr.	Boiciful	S, Ar	Rs	Fr, M	Na	C	TH-1716
▪ <i>Salix tetrasperma</i> Roxb.	Panijoma	T	Wt		Na	Oc	TH-1700
Sapindaceae							
▪ <i>Litchi chinensis</i> Sonn.	Lichu	T	Hs, Pl	Fr	Ex	C	TH-1752
Sapotaceae							
▪ <i>Manilkara zapota</i> (L.) P.Royen	Safeda	T	Pl	Fr, M	Ex	C	TH-688
▪ <i>Mimusops elengi</i> L.	Bokul	T	Pl	M, O	Ex	C	TH-751
Scrophulariaceae							
▪ <i>Verbascum coromandelianum</i> (Vahl) Hub.-Mor.	Bascum	H	Fl			Oc	TH-1600
Smilacaceae							
▪ <i>Smilax perfoliata</i> Lour.	Kumarilata	L, Ar	Bt, Rs,	M		C	TH-1217
Solanaceae							
▪ <i>Capsicum frutescens</i> L.	Marich	S	Cl	Sp	Ex	C	TH-396
▪ <i>Cestrum nocturnum</i> L.	Hasna hena	S	Pl	O	Ex	C	TH-15
▪ <i>Datura metel</i> L.	Dhutra	S	Rs	M	Ex	C	TH-493
▪ <i>Nicotiana plumbaginifolia</i> Viv.	Bontamak	H	Fl	M	Ex	VC	TH-196

▪ <i>Nicotiana tabacum</i> L.	Tamak	S	Cl			C	TH-1364
▪ <i>Physalis angulata</i> L.	Phutki	H	Cr	M	Ex	VC	TH-272
▪ <i>Solanum americanum</i> Mill.	Tit-begun	H	Fl	M	Ex	C	TH-653
▪ <i>Solanum erianthum</i> D.Don	Arasa	S	Rs		Ex	Oc	TH-354
▪ <i>Solanum melongena</i> L.	Begun	S	Cl	Vg	Na	C	TH-1211
▪ <i>Solanum sisymbriifolium</i> Lam.	Kanta begun	S	Rs			VC	TH-698
▪ <i>Solanum torvum</i> Sw.	Gothbegun	S	Rs	M, Vg	Ex	C	TH-470
▪ <i>Solanum villosum</i> Mill.	Villo begun	H	Cr			VC	TH-701
▪ <i>Solanum violaceum</i> Ortega	Phutki	S	Rs	M		C	TH-750
Urticaceae							
▪ <i>Dendrocnide sinuata</i> (Blume) Chew	Laua-chutra	S	Pl	M, Po		Oc	TH-1119
▪ <i>Laportea interrupta</i> (L.) Chew	Lalbichuti	H	Fl	M, Po		Oc	TH-520
▪ <i>Pilea microphylla</i> (L.) Liebm	Latamaricha	H,Er	Br	O	Ex	C	TH-1720
▪ <i>Pouzolzia zeylanica</i> (L.) Benn	Kullarruki	H, Cp	Fl	M	Na	VC	TH-282
Verbenaceae							
▪ <i>Duranta erecta</i> L.	Katamehedi	S	Fl	O	Ex	C	TH-717
▪ <i>Lantana camara</i> L.	Putush	L	Rs	M	Ex	VC	TH-754
▪ <i>Lippia alba</i> (Mill.) N.E.Br. ex Britton & P.Wilson	Vui-okra	H, Cp	Wt	M	Na	VC	TH-5
▪ <i>Phyla nodiflora</i> (L.) Greene	Vuiokra	H, Cp	Fl	M	Na	VC	TH-268
Violaceae							
▪ <i>Afrohybanthus enneaspermus</i> (L.) Flicker	Hyban	H, Er	Rs			C	TH-20
Vitaceae							
▪ <i>Ampelocissus latifolia</i> (Roxb.) Planch.	Gowalia-lata	L	Rs	M	Na	VC	TH-1083
▪ <i>Causonis trifolia</i> (L.) Mabb. & J.Wen	Amollata	L	Fl	M	Na	C	TH-338
▪ <i>Cayratia pedata</i> (Lam.) Gagnep.	Goalilata	L	Rs	M		VC	TH-342
▪ <i>Leea indica</i> (Burm.f.) Merr.	Kukurjhibba	S	Rs	M		Oc	TH-1468
▪ <i>Leea macrophylla</i> Roxb. ex Hornem.	Hastikarna	S	Hs	M		R	TH-1749
Zingiberaceae							
▪ <i>Alpinia nigra</i> (Gaertn.) Burt	Jongli ada	S, Er	Wt	M	Na	Oc	TH-1629
▪ <i>Curcuma longa</i> L.	Holud	H	Cl	Sp		VC	TH-1564
▪ <i>Curcuma zedoaria</i> (Christm.) Roscoe	Soti	H	Bt	M		Oc	TH-381
▪ <i>Zingiber zerumbet</i> (L.) Roscoe ex Sm.	Bonada	H	Bt	M		R	TH-373

Habit: Anchored=An, Armed=Ar, Creeper=Cp, Erect=Er, Free floating= Ff, Grass=Gr, Herb=H, Liana=L, Scandent=Sc, Shrub=S, Submargined=Sm, Tree=T and Vine=V; **Habitat:** Aquatic=Aq, Brick wall=Br, Bamboo thicket=Bt, Cultivated=Cl, Crop field=Cr, Epiphyte= Ep, Fallow land= Fl, Grass land=Gf, Homestead= Hs, Land margin=Lm, Planted=Pl, Road/Railway side= Rs, Shady place=Sd, Wetland= Wt and Wild=Wd; **Use:** Bamboo crafts=Bc, Building materials= Bm, Dye= Dy, Edible= Ed, Fish feed=Fe, Fiber= Fb, Fence=Fn, Fodder= Fo, Fruit= Fr, Fuel wood=Fw, Handi crafts=Hc, Medicinal= M, Oil yielding= Oi, Ornamental= O, Pisonous=Po, Pulse=Pu, Soil binder=Sb, Spice = Sp, Timber= Ti and Vegetable=Vg; **Origin:** Native=Na, Exotic=Ex; **Status:** Common=C, Occasional=Oc, Rare=R and Very common=Vc and Represent specimen examined=RSE: TH= Tarikul Hasan

Conclusion

This work resulting that the study area is rich in Angiosperm species. But, on the basis of field observation of richness and their population size, eighteen species were found as rare or species of conservation concern for this area. Most of the rare species have medicinal potentiality. As early as possible, rare species should be considered for 'in-situ' and 'ex-situ' conservation otherwise they might be vanish in the coming days. It is good sign that the most of the species are native and they are important for medicine and food. Expansion of arable land and habit distraction by the residents in many ways are identified as the main threats of this area. Therefore, some steps such as raising awareness about the importance of indigenous plants; preserving plant diversity during construction, cultivation, and plantation;

sustainable use of medicinal plants as well as conservation of rare and sporadic plants, should be taken.

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