

## ASSESSMENT OF ANGIOSPERMIC FLORA AT RAJSHAHI METROPOLITAN AREA OF BANGLADESH

FARHANA KHANOM, A H M MAHBUBUR RAHMAN\*

Plant Taxonomy Laboratory, Department of Botany, Faculty of Biological Sciences, University of Rajshahi, Rajshahi, Bangladesh.

\*Email: drrahmanahmm@ru.ac.bd

Received: 24 May 2023, Revised and Accepted: 08 June 2023

### ABSTRACT

**Objectives:** The study aimed to document the angiospermic flora at Rajshahi metropolitan area of Bangladesh. The study also examined the species diversity in the study area.

**Methods:** The research work is based on fresh materials collected during 33 field visits at Rajshahi metropolitan area of Bangladesh was carried out from February 2016 to March 2017 to cover the seasonal variations. Plant parts with either flower or fruits collected using traditional herbarium techniques to make voucher specimens for documentation.

**Results:** The results show that a total of 494 species belonging to 455 genera and 106 families were recorded. Of these, Magnoliopsida (Dicotyledones) is represented by 413 species under 390 genera and 84 families while Liliopsida (Monocotyledones) is represented by 81 species under 65 genera and 22 families. For each species scientific name, local name, family name, habit, relative occurrence, and flowering time were recorded. The present study will help in identifying the major angiospermic plant species for further investigation.

**Conclusion:** The present research focused on the angiospermic flora growing throughout the Rajshahi metropolitan area of Bangladesh. A total of 494 angiospermic plant species were recorded.

**Keywords:** Diversity, Angiospermic flora, Rajshahi metropolitan area, Bangladesh.

© 2023 The Authors. Published by Innovare Academic Sciences Pvt Ltd. This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>) DOI: <http://dx.doi.org/10.22159/ijls.2023v11i1.48407>. Journal homepage: <https://innovareacademics.in/journals/index.php/ijls>

### INTRODUCTION

Flowering plants (angiosperms) are the most diverse group of land plants, also known as Angiospermae Lindl or Magnoliophyta. Angiosperms, like gymnosperms, are seed-producing plants that can be distinguished from gymnosperms by a series of synapomorphies (derived characteristics). Flowers, endosperm within the seeds, and the production of seeds-containing fruits are among these characteristics. Angiosperm is an etymological term for a plant that produces seeds within a container; they are fruiting plants, though they are more commonly known as flowering plants.

A taxon's description, whether it is a phylum, a family, or a species, is a declaration of its traits, which together form the taxon's definition. Taxonomic or systematic characters are those that contribute to a taxonomic description. A diagnosis is a condensed description that only includes the diagnostic features that are required to distinguish a taxon from other taxa. For example, the genus *Brassica* has various species such as *Brassica nigra* (black mustard), *Brassica juncea* (rai), *Brassica rapa* (shalgam), and others; however, the genus *Brassica* is distinguished from all other genera in the Cruciferae family by some common characteristics (Brassicaceae). Angiosperms are vascular plants that produce seeds. Flowers with ovules enclosed in an ovary are their reproductive structures. Angiosperms can be found in a wide variety of environments, from forests and grasslands to seashores and deserts. Trees, herbs, submerged aquatics, bulbs, and epiphytes are just a few of the life forms found in angiosperms. Orchids, Compositae (daisies), and legumes are the three largest plant families (beans). Flowering plants, also known as angiosperms has number around 3, 52, 000 species of the world. Around 245–202 million years ago, flowering plants split from gymnosperms and the first flowering plants were discovered around 160 million years ago. During the Lower Cretaceous, they diversified greatly and became widespread around 120 million years ago, but they only replaced conifers as the dominant trees around 60–100 million years ago [1].

Angiospermic flora was carried out in Bangladesh by [2-42]. The aim of the present research was to explore and assess the diversity of angiosperms at Rajshahi metropolitan area of Bangladesh.

### METHODS

#### Study area

Rajshahi is a metropolitan city and a major urban, commercial, and educational center of Bangladesh. It is also the administrative seat of the eponymous division and district. Located on the north bank of the Padma River, near the Bangladesh-India border, the city has a population of over 1,250,000 residents. The town is surrounded by the satellite towns of Nowhatta and Katakhal, which together build an urban agglomeration of about 1 million population. Modern Rajshahi lies in the ancient region of Pundravardhana. The foundation of the city dates to 1634, according to epigraphic records at the mausoleum of Sufi saint Shah Makhdum. The area hosted a Dutch settlement in the 18<sup>th</sup> century. The Rajshahi municipality was constituted during the British Raj in 1876. It was a divisional capital of the Bengal Presidency.

Rajshahi is a significant administrative, educational, cultural, and business center in Bangladesh. It is a historic center of silk production. Varendra Research Museum, the oldest of its kind in Bangladesh, is located in the city. The city is home to many renowned educational institutions of Bangladesh. The head office of Rajshahi Agricultural Development Bank and Barind Multipurpose Development Authority (BMDA) is situated in the city. The Shah Makhdum Airport serves Rajshahi. According to The Guardian, it is the cleanest city in Bangladesh [43].

#### Methodology

The work is based on fresh materials collected during 33 visits to Rajshahi metropolitan area of Bangladesh from February 2016 to March 2017 to cover the seasonal variations. The visits covered all types of habitats, particular riverbank; char land area, slope, village grove, fruit

Table 1: The families of the plant species recorded

Family name	No. of herbs	No. of shrubs	No. of Climbers	No. of trees
Acanthaceae	8	3	1	-
Agavaceae	2	-	-	-
Amaranthaceae	14	-	-	-
Anacardiaceae	-	-	-	5
Annonaceae	-	-	-	3
Apiaceae	4	-	-	-
Apocynaceae	3	4	-	5
Araceae	7	-	1	-
Aloeaceae	2	-	-	-
Arecaceae	-	1	-	4
Aristolochiaceae	-	-	1	-
Asclepiadaceae	2	1	-	-
Asteraceae	34	2	1	-
Balsaminaceae	1	-	-	-
Basellaceae	-	-	1	-
Bignoniaceae	-	-	1	6
Bixaceae	-	-	-	1
Bombacaceae	-	-	-	2
Boraginaceae	1	-	-	2
Brassicaceae	6	-	-	-
Cactaceae	4	-	1	-
Caesalpinaceae	-	5	-	9
Cannaceae	1	-	-	-
Cannabaceae	1	-	-	-
Capparaceae	2	-	-	1
Caricaceae	-	-	-	1
Casuarinaceae	-	-	-	1
Ceratophyllaceae	1	-	-	-
Chenopodiaceae	2	-	-	-
Combretaceae	-	1	-	4
Commelinaceae	2	-	-	-
Convolvulaceae	1	1	9	-
Crassulaceae	3	-	-	-
Cucurbitaceae	-	-	19	-
Cuscutaceae	-	-	1	-
Cyperaceae	9	-	1	-
Dilleniaceae	-	-	-	1
Dioscoreaceae	-	-	2	-
Dipterocarpaceae	-	-	-	1
Ebenaceae	-	-	-	3
Elaeocarpaceae	-	-	-	1
Euphorbiaceae	8	11	-	7
Fabaceae	12	4	5	4
Flacourtiaceae	-	1	-	-
Fumariaceae	1	-	-	-
Gentianaceae	1	-	-	-
Heliconiaceae	1	-	-	-
Hydrocharitaceae	3	-	-	-
Lamiaceae	5	4	-	-
Lauraceae	-	1	-	2
Lecythidaceae	-	-	-	3
Liliaceae	9	-	1	-
Lemnaceae	1	-	-	-
Lentibulariaceae	1	-	-	-
Loranthaceae	1	-	-	-
Lythraceae	-	2	-	1
Magnoliaceae	-	-	-	1
Malvaceae	5	4	-	1
Meliaceae	-	-	-	5
Menispermaceae	-	-	2	-
Menyanthaceae	1	-	-	-
Mimosaceae	1	-	-	8
Molluginaceae	2	-	-	-
Moraceae	-	-	1	9
Moringaceae	-	-	-	1
Musaceae	-	1	-	-
Myrtaceae	-	-	-	8
Najadaceae	1	-	-	-
Nyctaginaceae	1	-	2	-
Nymphaeaceae	1	-	-	-

(Contd...)

Table 1: (Continued)

Family name	No. of herbs	No. of shrubs	No. of Climbers	No. of trees
Onagraceae	2	-	-	-
Oleaceae	-	3	-	-
Orchidaceae	2	-	1	-
Oxalidaceae	4	-	-	1
Papaveraceae	1	-	-	-
Passifloraceae	-	-	1	-
Pedaliaceae	1	-	-	-
Piperaceae	3	-	1	-
Plantaginaceae	1	-	-	-
Poaceae	12	4	-	2
Polygonaceae	8	-	-	-
Pontederiaceae	3	-	-	-
Portulacaceae	2	-	-	-
Primulaceae	3	-	-	-
Potamogetonaceae	1	-	-	-
Punicaceae	-	1	-	-
Ranunculaceae	1	-	-	-
Rhamnaceae	-	-	-	1
Rosaceae	-	2	-	-
Rubiaceae	1	3	1	3
Rutaceae	-	4	-	3
Salicaceae	-	-	-	3
Sapindaceae	-	-	1	1
Sapotaceae	-	-	-	3
Scrophulariaceae	5	-	-	-
Smilacaceae	-	-	1	-
Solanaceae	7	9	-	-
Sterculiaceae	-	1	-	1
Strelitziaceae	-	1	-	-
Tiliaceae	-	1	-	2
Typhaceae	1	-	-	-
Ulmaceae	-	-	-	1
Urticaceae	4	-	-	-
Verbenaceae	2	4	-	3
Vitaceae	-	-	2	-
Zingiberaceae	4	-	-	-
Total	233	79	58	124

gardens, fallow lands, crop fields, and roadsides of the study area. Plant parts with either flowers or fruits were collected using traditional herbarium techniques to make voucher specimens for documentation.

#### Identification

Collected angiospermic plant species were authentically identified with the help of various books [44-46]. For the current name and up-to-date nomenclature, Huq [47,48] was also consulted.

#### RESULTS

Assessment of angiospermic flora at Rajshahi metropolitan area of Bangladesh has been analyzed by conducting 33 field trips in various seasons during February 2016–March 2017. A total of 494 species belonging to 455 genera under 106 families were recorded. Of these, Magnoliopsida (Dicotyledones) is represented by 413 species under 390 genera and 84 families while Liliopsida (Monocotyledones) is represented by 81 species under 65 genera and 22 families. Asteraceae is the largest family in Magnoliopsida represented by 37 species and, in Liliopsida; Poaceae is the largest family with 18 species. Habit analysis shows that herbs, shrubs, climbers, and trees are represented by 233, 79, 58, and 124 species, respectively (Table 1). Amaranthaceae, Asteraceae, Apocynaceae, Caesalpinaceae, Convolvulaceae, Cucurbitaceae, Euphorbiaceae, Fabaceae, Moraceae, Malvaceae, Mimosaceae, Myrtaceae, Poaceae, Rutaceae, and Solanaceae are the dominant families with high species diversity. For each species scientific name, local name, habit, flowering time, relative occurrence, and family were provided (Table 2). Of 494 species recorded here, herbs are represented by 233 (47.17%), trees by 124 (27.47%), shrubs by 79 (15.99%), and climber by 58 (11.74%) species (Fig. 1).

Table 2: Assessment of angiospermic flora at Rajshahi metropolitan area of Bangladesh

Scientific name	Local name	Family name	Habit	Relative occurrence	Flowering time
<i>Abelmoschus esculentus</i> (L.) Moench.	Dherosh	Malvaceae	Herb	C	Feb-Apr
<i>Abroma augusta</i> L.	Ulatkambal	Sterculiaceae	Shrub	T	Jun-Oct
<i>Abrus precatorius</i> L.	Kuch	Fabaceae	Climber	R	
<i>Abutilon indicum</i> (L.) Sweet.	Potari	Malvaceae	Herb	C	Sep-Apr
<i>Acacia auriculiformis</i> A. Cunn. ex Benth.	Akasmoni	Mimosaceae	Tree	C	Jan-Dec
<i>Acacia catechu</i> (L.f.) Willd.	Khair	Mimosaceae	Tree	C	Apr-Aug
<i>Acacia nilotica</i> L.	Babla	Mimosaceae	Tree	C	Apr-Aug
<i>Acalypha indica</i> L.	Muktajhuri	Euphorbiaceae	Herb	C	Jun-Dec
<i>Achyranthes aspera</i> L.	Apang	Amaranthaceae	Herb	C	Jan-Dec
<i>Acorus calamus</i> L.	Bach	Araceae	Herb	C	Jan-Dec
<i>Acrocephalus hispidus</i> (L.) Nicol.	Unknown	Lamiaceae	Herb	C	Nov-Feb
<i>Adhatoda vasica</i> Ness.	Basok	Acanthaceae	Shrub	C	Jan-Dec
<i>Aegle marmelos</i> (L.) Corr.	Bel	Rutaceae	Tree	C	Apr-Aug
<i>Aerva sanguinolenta</i> (L.) Blume.	Chaya	Amaranthaceae	Herb	C	Apr-Jul
<i>Agave americana</i> L.	Agave	Agavaceae	Herb	C	Jan-Dec
<i>Ageratum conyzoides</i> L.	Ochunti	Asteraceae	Herb	C	Jan-Dec
<i>Albizia lebbek</i> (L.) Benth.	Sirish	Mimosaceae	Tree	C	Jan-Dec
<i>Albizia lucida</i> (Roxb.) Benth.	Silkoroi	Mimosaceae	Tree	C	Jan-Dec
<i>Albizia procera</i> (Roxb.) Benth.	Koroi	Mimosaceae	Tree	C	May-Dec
<i>Albizia richardiana</i> King and Prain.	Gagansirish	Mimosaceae	Tree	C	Jan-Dec
<i>Alium cepa</i> L.	Piyaj	Liliaceae	Herb	C	Feb-Apr
<i>Alium sativum</i> L.	Rosun	Liliaceae	Herb	C	Feb-Apr
<i>Alocasia indica</i> (Roxb.) Schott.	Mankachhu	Araceae	Herb	C	Aug-Oct
<i>Aloe indica</i> (L.) Burm. f.	Ghritakumari	Aloeaceae	Herb	C	Jan-Dec
<i>Aloe jucunda</i> Thumb.	Jucunda	Aloeaceae	Herb	C	Jan-Dec
<i>Alstonia scholaris</i> (L.) R.Br.	Chatim	Apocynaceae	Tree	C	Nov-May
<i>Alternanthera philoxeroides</i> (Mart.) Griseb.	Malancha	Amaranthaceae	Herb	C	Mar-Jun
<i>Alternanthera sessilis</i> R.Br.	Chanshi	Amaranthaceae	Herb	C	Jan-Dec
<i>Alysicarpus vaginalis</i> (L.) DC.	Pan-nata	Fabaceae	Clim	C	July-Aug
<i>Amaranthus blitum</i> L.	Datashak	Amaranthaceae	Herb	C	Jan-Dec
<i>Amaranthus lividus</i> Roxb.	Gobranotey	Amaranthaceae	Herb	C	Jan-Dec
<i>Amaranthus spinosus</i> L.	Katanotey	Amaranthaceae	Herb	C	Jan-Dec
<i>Amaranthus tricolor</i> L.	Lalshak	Amaranthaceae	Herb	C	Jan-Dec
<i>Amaranthus viridis</i> L.	Shaknoty	Amaranthaceae	Herb	C	Jan-Dec
<i>Ammannia baccifera</i> L.	Janglimehedi	Lythraceae	Shrub	C	June-Oct
<i>Amorphophallus campanulatus</i> (Roxb.) Bl. ex. Decne.	Olkachu	Araceae	Herb	C	Jan-Dec
<i>Anacardium occidentale</i> L.	Kajubadam	Anacardiaceae	Tree	T	Apr-Jun
<i>Anagallis arvensis</i> L.	Pimpernel	Primulaceae	Herb	C	June-Sep
<i>Andrographis paniculata</i> Wall ex Ness.	Kalamegh	Acanthaceae	Herb	C	Jan-Mar
<i>Androsace saxifragefolia</i> Bunge.	Unknown	Primulaceae	Herb	C	Nov-Feb
<i>Anisomeles indica</i> (L.) Kut	Gobura	Lamiaceae	Shrub	C	Jan-Dec
<i>Annona reticulata</i> L.	Nona	Annonaceae	Tree	C	Mar-July
<i>Annona squamosa</i> L.	Aata	Annonaceae	Tree	C	Mar-July
<i>Anthocephalus chinensis</i> (Lamk.) Rich. ex Walp	Kodom	Rubiaceae	Tree	C	May-July
<i>Antirrhinum majus</i> L.	Snapdragon	Plantaginaceae	Herb	C	Dec-Jan
<i>Aphanamixis polystachya</i> Wall.	Pitraaj	Meliaceae	Tree	C	Feb-April
<i>Areca catechu</i> L.	Shupari	Arecaceae	Tree	C	Jan-Dec
<i>Argemone maxicana</i> L.	Sheyalkata	Papaveraceae	Herb	C	Feb-May
<i>Aristolochia indica</i> L.	Iswarmul	Aristolochiaceae	Clim	T	Jan-Dec
<i>Artocarpus heterophyllus</i> Lamk.	Kanthal	Moraceae	Tree	C	Apr-Jun
<i>Artocarpus lacucha</i> Roxb.	Dewa	Moraceae	Tree	R	Apr-Jun
<i>Asclepias daemia</i> Forssk.	Chagulbati	Asclepiadaceae	Herb	C	Jan-Dec
<i>Asparagus racemosus</i> L.	Shotomuli	Liliaceae	Clim	C	Jan-Dec
<i>Averrhoa carambola</i> L.	Kamranga	Oxalidaceae	Tree	C	Sep-Jan
<i>Azadirachta indica</i> J. Nat	Nim	Meliaceae	Tree	C	Mar-May
<i>Baccaurea ramiflora</i> Lour.	Lotkon	Euphorbiaceae	Tree	C	June-Aug
<i>Bacopa monnieri</i> (L.) Pernel.	Brammishak	Scrophulariaceae	Herb	R	June-Aug
<i>Bambusa balcooa</i> Roxb.	Valkabans	Poaceae	Tree	C	Jan-Dec
<i>Bambusa tulda</i> Roxb.	Tollabans	Poaceae	Tree	C	Jan-Dec
<i>Barleria cristata</i> L.	Swetjanti	Acanthaceae	Herb	C	Jan-Dec
<i>Barleria prionitis</i> L.	Kantajati	Acanthaceae	Herb	C	Jan-Dec
<i>Barringtonia acutangula</i> (L.) Gaertn.	Hijal	Lecythidaceae	Tree	R	May-Jun
<i>Basella alba</i> L.	Puishak	Basellaceae	Clim	C	Nov-Feb
<i>Bauhinia acuminata</i> L.	Kanchan	Caesalpinaceae	Tree	C	Mar-Nov
<i>Benincasa hispida</i> (Thunb.) Cogn.	Chalkumra	Cucurbitaceae	Clim	C	May-Sep
<i>Biophytum sensitivum</i> L.	Panilajuk	Oxalidaceae	Herb	T	Jan-Dec
<i>Bixa orellana</i> L.	Jafran	Bixaceae	Tree	R	Aug-Nov
<i>Blumea laciniata</i> (Wall. ex Roxb.) DC	Kukshima	Asteraceae	Herb	C	Jan-Dec
<i>Blumea lucera</i> L.	Bara Kukshima	Asteraceae	Herb	C	Jan-Dec

(Contd...)

Table 2: (Continued)

Scientific name	Local name	Family name	Habit	Relative occurrence	Flowering time
<i>Boerhaavia repens</i> L.	Punarnava	Nyctaginaceae	Clim	C	Jan-Dec
<i>Bombex ceiba</i> L.	Shimul	Bombacaceae	Tree	C	Feb-- Apr
<i>Borassus flabelliformis</i> L.	Taal	Arecaceae	Tree	C	Jan-Dec
<i>Bougainvillea spectabilis</i> Willd.	Baganbilash	Nyctaginaceae	Clim	C	Jan-Dec
<i>Brassica napus</i> L.	Sarisha	Brassicaceae	Herb	C	Mar-May
<i>Brassica oleracea</i> L. var. <i>botrydis</i>	Phulkapi	Brassicaceae	Herb	C	Dec-Feb
<i>Brassica oleracea</i> L. var. <i>capitata</i>	Badhakopi	Brassicaceae	Herb	C	Dec-Feb
<i>Brunfelsia calycina</i> Benth.		Solanaceae	Shrub	C	Jan-Dec
<i>Bryophyllum pinnatum</i> (Lam.) Kurtz	Pathorkuchi	Crassulaceae	Herb	C	Nov-Jan
<i>Butea monosperma</i> (Lam.) Kunt.	Palas	Fabaceae	Tree	C	Feb-Apr
<i>Caesalpinia pulcherrima</i> L.	Krishnachura	Caesalpinaceae	Shrub	C	Sep--Nov
<i>Caesulia axillaris</i> Roxb.	Caesulia	Asteraceae	Herb	C	Jan-Dec
<i>Cajanus cajan</i> (L.) Mill.	Arhor daal	Fabaceae	Shrub	C	Dec-Mar
<i>Calamus rotang</i> L.	Beth	Arecaceae	Shrub	R	Jan-Dec
<i>Calendula officinalis</i> Will.	Calendula	Asteraceae	Herb	C	Jan-Dec
<i>Callistemon citrinus</i> Thumb.	Bottle brush	Myrtaceae	Tree	C	Feb-Nov
<i>Callistephus chinensis</i> L.	Aster	Asteraceae	Herb	C	Aug-Sep
<i>Calotropis procera</i> Br.	Akondo	Asclepiadaceae	Shrub	C	Jan-Dec
<i>Calystegia hederacea</i> Wall.	Calystegia	Convolvulaceae	Clim	R	Aug-Oct
<i>Campsis radicans</i> Seem.	Unknown	Bignoniaceae	Clim	C	Jul-Aug
<i>Canna indica</i> L.	Kalaboti	Cannaceae	Herb	C	Jan-Dec
<i>Cannabis sativa</i> L.	Vang	Cannabaceae	Herb	C	Feb--May
<i>Capsicum frutescens</i> L.	Morice	Solanaceae	Herb	C	Jan-Dec
<i>Cardamine hirsuta</i> L.	Bon sorisa	Brassicaceae	Herb	C	Dec-Feb
<i>Cardiospermum halicacabum</i> L.	Sibjhulni	Sapindaceae	Clim	C	Jan-Dec
<i>Careya arborea</i> Roxb.	Kumvi	Lecythidaceae	Tree	R	Mar-Apr
<i>Carica papaya</i> L.	Pepe	Caricaceae	Tree	C	Jan-Dec
<i>Carissa carandas</i> (L.) K.Schum	Karomcha	Apocynaceae	Herb	C	Jan-Dec
<i>Casearia graveolens</i> Dalz.	Unknown	Salicaceae	Tree	R	Feb-Mar
<i>Casearia vareca</i> Roxb	Unknown	Salicaceae	Tree	R	Mar-Apr
<i>Cassia fistula</i> L.	Badorlathi	Caesalpinaceae	Tree	C	Mar-Apr
<i>Cassia grandis</i> L.	Minjuri	Caesalpinaceae	Tree	C	Mar-Apr
<i>Cassia renigera</i> L.	Minjuri	Caesalpinaceae	Tree	C	Jan-Dec
<i>Casuarina equisetifolia</i> L.	Jhau	Casuarinaceae	Tree	C	Sep-May
<i>Catharanthus roseus</i> L.	Noyontara	Apocynaceae	Herb	C	Jan-Dec
<i>Ceiba pentandra</i> (L.) Gaertn	Swetosimul	Bombacaceae	Tree	R	Feb-Apr
<i>Celosia cristata</i> L.	Morogful	Amaranthaceae	Herb	C	Jan-Dec
<i>Centella asiatica</i> (L.) Urb.	Thankuni	Apiaceae	Herb	C	Jan-Dec
<i>Ceratophyllum demersum</i> L.	Jhanjhi	Ceratophyllaceae	Herb	C	Jan-Dec
<i>Cereus hildmannianus</i> K. Schum.	Hedge Cactus	Cactaceae	Shrub	C	Jan-Dec
<i>Cestrum nocturnum</i> L.	Hasnahena	Solanaceae	Shrub	C	Jan-Dec
<i>Chenopodium album</i> L.	Bothua	Chenopodiaceae	Herb	C	Jan-Dec
<i>Chenopodium ambrosioides</i> L.	Bonbothua	Chenopodiaceae	Herb	C	Mar-May
<i>Chrozophora plicata</i> L.	Khudiokra	Euphorbiaceae	Herb	C	Feb-Apr
<i>Chrysonthemum coronarium</i> L.	Chandromollika	Asteraceae	Shrub	C	Dec-Feb
<i>Chrysopogon aciculatus</i> (Retz.) Trin.	Premkata	Poaceae	Herb	C	Jan-Dec
<i>Cinnamomum tamala</i> (Buch.-Ham.) T. Nees and Eberm	Tejpata	Lauraceae	Tree	R	Feb-Jul
<i>Cinnamomum verum</i> J. Presl.	Daruchini	Lauraceae	Tree	R	Jan-Mar
<i>Circium arvense</i> (L.) Scop.	Circium	Asteraceae	Herb	C	Jan-Dec
<i>Citrullus lanatus</i> Thunb.	Turmuz	Cucurbitaceae	Clim	C	July-Aug
<i>Citrus aurantifolia</i> L.	Lebu	Rutaceae	Tree	C	Mar-Sep
<i>Citrus grandis</i> (L.) Osbeck	Jambura	Rutaceae	Tree	C	Feb-Apr
<i>Citrus limon</i> (L.) Brum.f.	Goralebu	Rutaceae	Shrub	C	June-Dec
<i>Cleome hassleriana</i> Chod.	Lal Hurhuria	Capparaceae	Herb	C	Feb-Oct
<i>Cleome viscosa</i> L.	Hurhuria	Capparaceae	Herb	C	Jan-Dec
<i>Clerodendrum viscosum</i> L.	Bhat	Verbenaceae	Shrub	C	Jan-May
<i>Clitoria ternatea</i> L.	Oporajita	Fabaceae	Clim	C	June-Dec
<i>Coccinia cordifolia</i> (L.) Cogn.	Telakucha	Cucurbitaceae	Clim	C	Jan-Dec
<i>Cocos nucifera</i> L.	Daab	Arecaceae	Tree	C	Jan-Dec
<i>Codiaeum variegatum</i> (L.) Blume.	Patabahar	Euphorbiaceae	Shrub	C	Jan-Dec
<i>Coix lachryona-jobi</i> L.	KachorKuch	Poaceae	Shrub	R	May-Jul
<i>Colocasia esculenta</i> (L.) Schott	Kochu	Araceae	Herb	C	Jun-Dec
<i>Commelina benghalensis</i> L.	Kanshira	Commelinaceae	Herb	C	Apr-Aug
<i>Commelina longifolia</i> Lamk.	Pani Kanshira	Commelinaceae	Herb	C	Oct-Mar
<i>Corchorus capsularis</i> L.	Deshipat	Tiliaceae	Shrub	C	Mar-Jun
<i>Cordia myxa</i> L.	Bowla	Boraginaceae	Tree	C	Mar-Apr
<i>Cordia sebestena</i> L.	Unknown	Boraginaceae	Tree	R	Jan-Mar
<i>Coriandrum sativum</i> L.	Dhonepata	Apiaceae	Herb	C	Dec-Feb
<i>Cosmos caudatus</i> Kunth	Cosmos	Asteraceae	Herb	C	Nov-Feb

(Contd..)

Table 2: (Continued)

Scientific name	Local name	Family name	Habit	Relative occurrence	Flowering time
<i>Costus speciosus</i> (Koenig ex Retz.) Smith.	Kushtha	Zingiberaceae	Herb	R	Nov-Mar
<i>Couroupita guianensis</i> Aubl.	Naglinga	Lecythidaceae	Tree	R	May-Aug
<i>Crataeva nurvala</i> Buch-Ham	Barun	Capparaceae	Tree	C	Nov-Dec
<i>Crescentia cujete</i> L.	Paglabel	Bignoniaceae	Tree	T	Jan-Dec
<i>Crinum asiaticum</i> L.	Sukdarshan	Liliaceae	Herb	C	Jan-Dec
<i>Croton bonplandium</i> Baill	Croton	Euphorbiaceae	Herb	C	Jan-Dec
<i>Cucumis melo</i> L.	Bangi	Cucurbitaceae	Clim	C	Mar-July
<i>Cucumis sativus</i> L.	Sosha	Cucurbitaceae	Clim	C	Apr-Sep
<i>Cucurbita maxima</i> Duch.	Mistikumra	Cucurbitaceae	Clim	C	Mar-Aug
<i>Cucurbita moschata</i> Duch.	Mistikumra	Cucurbitaceae	Clim	C	Mar-Aug
<i>Cucurbita pepo</i> DC.	Mistikumra	Cucurbitaceae	Clim	C	Mar-Aug
<i>Curcuma amada</i> Roxb.	Amada	Zingiberaceae	Herb	R	Jan-Dec
<i>Curcuma longa</i> L.	Holud	Zingiberaceae	Herb	C	Mar-Oct
<i>Cuscuta reflexa</i> Roxb.	Shornolota	Cuscutaceae	Clim	C	Aug-Dec
<i>Cyathula prostrata</i> (L.) Blume.	Boroapang	Amaranthaceae	Herb	R	Sep-Nov
<i>Cymbopogon citratus</i> (DC. ex Nees) Stapf.	Ghandhabena	Poaceae	Herb	R	Jan-Dec
<i>Cynodon dactylon</i> Pers.	Durba	Poaceae	Herb	C	Jan-Dec
<i>Cyperus articulatus</i> L.	Unknown	Cyperaceae	Herb	C	Jan-Dec
<i>Cyperus difformis</i> L.	Unknown	Cyperaceae	Herb	C	Jan-Dec
<i>Cyperus eragrostis</i> Lam.	Unknown	Cyperaceae	Herb	C	Mar-Oct
<i>Cyperus iria</i> L.	Burachucha	Cyperaceae	Herb	C	Jan-Dec
<i>Cyperus rotundus</i> L.	Mutha	Cyperaceae	Herb	C	Jan-Dec
<i>Cyperus scariosus</i> Br.	Nagarmutha	Cyperaceae	Herb	C	Jan-Dec
<i>Dahlia hybrida</i> L.	Dahlia	Asteraceae	Herb	C	Jan-Dec
<i>Dalbergia sissoo</i> Thumb.	Sishu	Fabaceae	Tree	C	Mar-May
<i>Datura metel</i> L.	Dhutura	Solanaceae	Shrub	C	Jan-Aug
<i>Daucus carota</i> L.	Gajor	Apiaceae	Herb	C	Jan-Dec
<i>Delonix regia</i> (Boj. ex Hook.) Raf.)	Krishnochura	Caesalpinaceae	Tree	C	Apr-Aug
<i>Derris indica</i> (Lamk.) Bennet.	Karanja	Fabaceae	Tree	C	Apr-May
<i>Desmodium gangeticum</i> (L.) DC.	Salpani	Fabaceae	Herb	C	Jan-Dec
<i>Desmodium heterocarpon</i> (L.) DC.	Salpani	Fabaceae	Herb	C	Jan-Dec
<i>Desmodium triflorum</i> (L.) DC.	Salpani	Fabaceae	Herb	C	Jan-Dec
<i>Digera muricata</i> (L.) Mart.	Latamouri	Amaranthaceae	Herb	R	Feb-Jul
<i>Dillenia indica</i> L.	Chalta	Dilleniaceae	Tree	R	May-Oct
<i>Dioscorea alata</i> L.	Chupri Alu	Dioscoreaceae	Clim	T	Jan-Dec
<i>Dioscorea bulbifera</i> L.	Banalu	Dioscoreaceae	Clim	T	Jan-Dec
<i>Diospyros montana</i> Roxb.	Bangab	Ebenaceae	Tree	T	May-Jul
<i>Diospyros peregrina</i> (Gaertn.) Gur.	Gab	Ebenaceae	Tree	C	May-Jul
<i>Diospyros philippensis</i> (Des.) Gur.	Bilatigab	Ebenaceae	Tree	C	May-Jul
<i>Dopatrium junceum</i> (Roxb.) Buch.-Ham. ex Benth.	Unknown	Scrophulariaceae	Herb	T	Feb-Dec
<i>Dracaena spicata</i> Roxb.	Dracaena	Agavaceae	Herb	C	Jan-Dec
<i>Duranta repens</i> L.	Katamehedi	Verbenaceae	Shrub	C	Jan-Dec
<i>Dyckia brevifolia</i> Thumb.	Dyckia	Cactaceae	Herb	C	Jan-Dec
<i>Ecbolium viride</i> (Forsk.) Alst.	Udajati	Acanthaceae	Shrub	C	Jan-Dec
<i>Eclipta alba</i> (L.) Hassk.	Kalokesh	Asteraceae	Herb	C	Jan-Dec
<i>Eichhornia crassipes</i> (Mart.) Solms.	Kachuripana	Pontederiaceae	Herb	C	Jan-Dec
<i>Elaeocarpus robustus</i> Roxb.	Jolpai	Elaeocarpaceae	Tree	C	Mar-June
<i>Eleocharis palustris</i> (L.) Roem. and Schult.	Spike-rush	Cyperaceae	Herb	C	Feb-Mar
<i>Eleusine indica</i> (L.) Gaertn.	Malankuri	Poaceae	Herb	C	June-Dec
<i>Emilia sonchifolia</i> (L.) DC. in Waight.	Emilia	Asteraceae	Herb	C	Jan-Dec
<i>Enhydra fluctuans</i> Lour.	Helencha	Asteraceae	Herb	C	Nov-Feb
<i>Epipremnum aureum</i> Linden and Andre	Moneyplant	Araceae	Clim	C	June-Dec
<i>Erythrina variegata</i> L.	Mathar	Fabaceae	Tree	C	Feb-Apr
<i>Ethulia conyzoides</i> L.	Golphulia	Asteraceae	Herb	T	Jan-Dec
<i>Eucalyptus citrodora</i> Hook.	Eucalyptus	Myrtaceae	Tree	C	Jan-Dec
<i>Eupatorium odoratum</i> L.	Germanlata	Asteraceae	Herb	C	Jan-Dec
<i>Euphorbia antiquorum</i> L.	Tiktasij	Euphorbiaceae	Shrub	C	Jan-Dec
<i>Euphorbia cotinifolia</i> L.	Euphorbia	Euphorbiaceae	Shrub	C	Apr-Aug
<i>Euphorbia helioscopia</i> L.	Shwet kerui	Euphorbiaceae	Herb	C	Jan-Dec
<i>Euphorbia hirta</i> L.	Dudhiya	Euphorbiaceae	Herb	C	Jan-Dec
<i>Euphorbia milli</i> Des.	Christ plant	Euphorbiaceae	Shrub	C	Jan-Dec
<i>Euphorbia pulcherrima</i> Will.	Lalpata	Euphorbiaceae	Shrub	C	Dec-Feb
<i>Euphorbia tirucalli</i> L.	Lanka Sij	Euphorbiaceae	Tree	C	Jan-Dec
<i>Euphorbia tithymaloides</i> L.	Rangchita	Euphorbiaceae	Shrub	C	Jan-Dec
<i>Evolvulus nummularius</i> (L.) L.	Bhuiokra	Convolvulaceae	Herb	C	Jan-Dec
<i>Exacum pedunculatum</i> L.	Kachuri	Gentianaceae	Herb	C	Oct-May
<i>Feronia elephantum</i> (L.) Sw	Kothbel	Rutaceae	Tree	C	Feb-Aug
<i>Ficus benghalensis</i> L.	Bot	Moraceae	Tree	C	May-Jul
<i>Ficus elastica</i> Roxb.	Bharotio rubber	Moraceae	Tree	C	Jan-Dec

(Contd..)

Table 2: (Continued)

Scientific name	Local name	Family name	Habit	Relative occurrence	Flowering time
<i>Ficus hispida</i> L.f.	Khoksha	Moraceae	Tree	C	Apr– Aug
<i>Ficus pumila</i> L.	Lota dumor	Moraceae	Clim	C	May–Oct
<i>Ficus racemosa</i> L.	Jagdumur	Moraceae	Tree	C	Mar–May
<i>Ficus religiosa</i> L.	Pakur	Moraceae	Tree	C	July–Oct
<i>Flacourtia indica</i> (Burm. f.) Merr.	Bichuti	Flacourtiaceae	Shrub	C	Dec–Mar
<i>Fleurya interupta</i> (L.) Gaudich.	Unknown	Urticaceae	Herb	C	July–Aug
<i>Fumaria indica</i> (Hauuskn.) Pugsley.	Bassulpha	Fumariaceae	Herb	C	Apr–May
<i>Gardenia jasminoides</i> Ellis.	Gondhoraj	Rubiaceae	Shrub	C	Mar–May
<i>Glinus oppositifolius</i> (L.) Aug. DC.	Gimashak	Molluginaceae	Herb	C	Jan–Dec
<i>Gloriosa superba</i> L.	Agnishikha	Liliaceae	Herb	R	Jan–Dec
<i>Glycosmis pentaphylla</i> Retz.	Ashshaora	Rutaceae	Shrub	C	Apr–Oct
<i>Gmelina arborea</i> Roxb.	Gamar	Verbenaceae	Tree	R	Feb–Apr
<i>Gnaphalium indicum</i> L.	Kamra	Asteraceae	Herb	C	Jan–Dec
<i>Gnaphalium pulvinatum</i> (Delile) Greuter.	Bara Kamra	Asteraceae	Herb	C	Jan–Dec
<i>Gomphrena globosa</i> L.	Botamphul	Amaranthaceae	Herb	C	Jun–Oct
<i>Gomphrena pulchella</i> Mart.	Bonno- botamphul	Amaranthaceae	Herb	C	June–Oct
<i>Grangea maderaspatana</i> (L.) Poir	Nemuti	Asteraceae	Herb	C	Jan–Dec
<i>Grewia subinaequalis</i> DC.	Phalsa	Tiliaceae	Tree	R	Apr–May
<i>Gymnopetalum cochinchinense</i> (Lour.) Kurtz.	Kabuti	Cucurbitaceae	Clim	T	May–Sep
<i>Haemanthus multiflorus</i> (Martyn) Raf.	May ball	Liliaceae	Herb	C	May–Jun
<i>Haldina cordifolia</i> (Roxb.) Rid	Kali kodom	Rubiaceae	Tree	R	Aug–Sep
<i>Hedyotis corymbosa</i> (L.) Link.	Khetpapra	Rubiaceae	Herb	C	Jan–Dec
<i>Helianthus annuus</i> L.	Surjomukhi	Asteraceae	Herb	C	Jan–Dec
<i>Heliconia rostrata</i> Ruiz & Pav.	Heliconia	Heliconiaceae	Herb	C	Jan–Dec
<i>Heliotropium indicum</i> L.	Hatishur	Boraginaceae	Herb	C	Jan–Dec
<i>Hemerocallis fulva</i> (L.) L.	Hemerocallis	Liliaceae	Herb	T	Jan–Sep
<i>Hemigraphis hirta</i> (Vahl) T. Anderson	Buripana	Acanthaceae	Herb	C	Jan–July
<i>Hibiscus mutabilis</i> L.	Sthalpadma	Malvaceae	Shrub	C	Jan–Dec
<i>Hibiscus rosa-sinensis</i> L.	Joba	Malvaceae	Shrub	C	Jan–Dec
<i>Holarrhena antidysenterica</i> Wall.	Kurchi	Apocynaceae	Tree	C	May–Jun
<i>Hopea odorata</i> Roxb.	Telsur	Dipterocarpaceae	Tree	C	Jan–Dec
<i>Houttuynia cordata</i> Thunb.	Ashity	Piperaceae	Herb	R	Mar–Oct
<i>Hydrilla verticillata</i> (L. f.) Royle	kureli	Hydrocharitaceae	Herb	C	Jan–Dec
<i>Hydrocotyle sibthorpioidis</i> Lamk.		Apiaceae	Herb	C	Jan–Dec
<i>Hypophila auriculata</i> (Schumach.) Heine	Talmakhna	Acanthaceae	Herb	C	Jan–Dec
<i>Hylocereus undatus</i> (Haw.) Britton & Rose	Dragon fruit	Cactaceae	Clim	R	July–Oct
<i>Ichnocarpus frutescens</i> (L.) R. Br.	Loilata	Apocynaceae	Herb	R	Jan–Dec
<i>Impatiens balsamina</i> Thumb.	Dopati	Balsaminaceae	Herb	C	Mar–Aug
<i>Imperata cylindrica</i> (L.) P. Beauv.	Ullu	Poaceae	Herb	C	June–Dec
<i>Indigofera tinctoria</i> L.	Nil	Fabaceae	Shrub	T	Jan–Dec
<i>Ipomoea aquatica</i> Forssk.	Kalmishak	Convolvulaceae	Clim	C	Jan–Oct
<i>Ipomoea batatas</i> (L.) Lamk.	Mistialu	Convolvulaceae	Clim	C	Jan–Dec
<i>Ipomoea cairica</i> (L.) Sweet	Morning glory	Convolvulaceae	Clim	C	Jan–Dec
<i>Ipomoea fistulosa</i> (Mart. ex Choisy)	Dholkalmi	Convolvulaceae	Shrub	C	Jan–Dec
<i>Ipomoea indica</i> (Burm.) Merr	Blue morning- glory	Convolvulaceae	Clim	C	Jul–Apr
<i>Ipomoea nil</i> (L.) Roth	Nilkalmi	Convolvulaceae	Clim	C	Nov–Apr
<i>Ipomoea purpurea</i> (L.) Roth.	Common morning-glory	Convolvulaceae	Clim	C	Jan–Dec
<i>Ipomoea quamoclit</i> L.	Getphul	Convolvulaceae	Clim	C	Jan–Dec
<i>Isachne globosa</i> (Thunb.) Kunt.	Jhirjhiri ghash	Poaceae	Herb	C	June–Dec
<i>Ixora coccinia</i> L.	Rongon	Rubiaceae	Shrub	C	Jan–Dec
<i>Jacaranda mimosifolia</i> Don.	Jacaranda	Bignoniaceae	Tree	T	Apr–June
<i>Jasminum angustifolium</i> (L.) Willd.	Kathmoni	Oleaceae	Shrub	C	June–Oct
<i>Jasminum pubescens</i> Willd.	Beli	Oleaceae	Shrub	C	Jan–Dec
<i>Jasminum sambac</i> (L.) Aiton.	Beli	Oleaceae	Shrub	C	Jan–Dec
<i>Jatropha curcas</i> L.	Jamalgota	Euphorbiaceae	Shrub	C	May–Oct
<i>Jatropha gossypifolia</i> L.	Lalverenda	Euphorbiaceae	Shrub	C	Apr–June
<i>Jussiaea repens</i> L.	Kesardam	Onagraceae	Herb	C	Jan–Dec
<i>Justicia gendarusa</i> L.	Jogotmodon	Acanthaceae	Shrub	C	Dec–Apr
<i>Kalanchoe blossfeldiana</i> Thunb.	Pathorkuchi	Crassulaceae	Herb	C	Nov–Jan
<i>Kalanchoe laciniata</i> (L.) DC	Pathorkuchi	Crassulaceae	Herb	C	May–Sep
<i>Kigelia pinnata</i> (Jacq.) DC.	Unkwone	Bignoniaceae	Tree	R	Apr–May
<i>Kyllinga monocephala</i> Rottb.	Nirbishi	Cyperaceae	Herb	C	Feb–Mar
<i>Lablab purpureus</i> (L.) Sweet.	Shim	Fabaceae	Clim	C	Nov–Feb
<i>Lactuca sativa</i> L.	Lettuce	Asteraceae	Herb	C	Jan–Mar
<i>Lagenaria siceraria</i> (Molina) Standl.	Lau	Cucurbitaceae	Clim	C	Feb–Apr
<i>Lagerstroemia speciosa</i> (L.) Pers.	Jarul	Lythraceae	Shrub	C	Apr–Jul

(Contd...)

Table 2: (Continued)

Scientific name	Local name	Family name	Habit	Relative occurrence	Flowering time
<i>Lannea coromandelica</i> (Houtt.) Merr	Jiga	Anacardiaceae	Tree	C	Mar-Apr
<i>Lantana camara</i> L.	Choita	Verbenaceae	Shrub	C	Jan-Dec
<i>Lasia spinosa</i> (L.) Thw.	Kantakachu	Araceae	Herb	T	June-Dec
<i>Lathyrus hirsutus</i> L.	Bon kheshari	Fabaceae	Herb	C	Jan-Mar
<i>Lathyrus sativus</i> L.	Kheshari	Fabaceae	Herb	C	Jan-Mar
<i>Launaea asplenifolia</i> Hook.f.	Tik-dana	Asteraceae	Herb	C	Jan-Dec
<i>Lawsonia alba</i> L.	Mehedi	Lythraceae	Shrub	C	Jun-Oct
<i>Lemna perpusilla</i> Torr.	Khudipana	Lemnaceae	Herb	C	Jan-Dec
<i>Lens culinaris</i> Medik.	Musur	Fabaceae	Herb	C	Jan-Dec
<i>Leucas aspera</i> L.	Shetadrone	Lamiaceae	Herb	C	Jan-Dec
<i>Leucas cephalotes</i> (Roxb.) Spreng.	Dandakolos	Lamiaceae	Herb	C	Jan-Dec
<i>Leucas lavendulaefolia</i> Rees.	Dronpuspi	Lamiaceae	Herb	C	Jan-Dec
<i>Lippia alba</i> L.	Borobhuiokra	Verbenaceae	Herb	C	Jan-Dec
<i>Lippia nodiflora</i> (L.) Greene.	Bhuiokra	Verbenaceae	Herb	C	Jan-Dec
<i>Litchi chinensis</i> Sonn.	Lichu	Sapindaceae	Tree	C	Apr-May
<i>Litsea monopetala</i> (Roxb.) Pers.	Pepulte	Lauraceae	Shrub	R	Mar-Sep
<i>Lophophora williamsii</i> (Lem. ex Salm-Dyck)	Peyote	Cactaceae	Herb	T	Mar-Sep
<i>Loranthus longiflorus</i> Desr.	Bhanda	Loranthaceae		C	Jan-Dec
<i>Ludwigia pariflora</i> L.	Bon Lobongo	Onagraceae	Herb	C	Jan-Dec
<i>Luffa acutangula</i> (L.) Roxb.	Jhinga	Cucurbitaceae	Clim	C	Apr-Sep
<i>Luffa cylindrical</i> L.	Dhundal	Cucurbitaceae	Clim	C	Jun-Aug
<i>Lycopersicon lycopersicum</i> (L.) Karsten	Tometo	Solanaceae	Herb	C	Jan-Dec
<i>Lysimachia nummularia</i> L.	Moneywort	Primulaceae	Herb	C	July-Sep
<i>Madhuca indica</i> Gmel.	Mahua	Sapotaceae	Tree	C	Jan-Dec
<i>Mallotus philippensis</i> (Lam.) Mull.Arg.	Kamala	Malvaceae	Tree	R	May-July
<i>Malvaviscus arboreus</i> Dill. ex Cav.	Morich phul	Malvaceae	Shrub	C	Jan-Dec
<i>Mammillaria baumii</i> Hugo.	Mammillaria	Cactaceae	Herb	T	May-Jun
<i>Mangifera indica</i> L.	Aam	Anacardiaceae	Tree	C	Jan-April
<i>Manihot esculenta</i> Crantz.	Kasava	Euphorbiaceae	Shrub	C	Jan-Dec
<i>Manilkara achras</i> Mill.	Sofeda	Sapotaceae	Tree	C	Jan-Dec
<i>Mecardonia procumbens</i> (Mill.) Small.	Unknown	Scrophulariaceae	Herb	C	Mar-May
<i>Melia sempervirens</i> Sw.	Ghoraneem	Meliaceae	Tree	C	Mar-May
<i>Melilotus alba</i> Lamk.	Sadamethi	Fabaceae	Herb	C	Jun-Oct
<i>Melilotus indica</i> L.	Holdamethi	Fabaceae	Herb	C	Sep-Jun
<i>Melothria maderaspatana</i> (L.) M.Roem.	Agmukhi	Cucurbitaceae	Clim	T	Jan-Dec
<i>Mentha arvensis</i> L.	Pudina pata	Lamiaceae	Herb	R	July-Aug
<i>Merremia hederacea</i> (Burm. f.) Hallier f	Sapussunda	Convolvulaceae	Clim	C	Jan-Dec
<i>Michelia champaka</i> L.	Champa	Magnoliaceae	Tree	R	Mar-May
<i>Mikania cordata</i> (Burm.f.) Roxb.	Asamlata	Asteraceae	Clim	C	Jan-Dec
<i>Mimosa pudica</i> L.	Lojjaboti	Mimosaceae	Herb	C	Sep-Nov
<i>Mimusops elengi</i> L.	Bokul	Sapotaceae	Tree	C	Mar-Apr
<i>Mirabilis jalapa</i> L.	Sondhamaloti	Nyctaginaceae	Herb	C	Jan-Dec
<i>Mollugo pentaphylla</i> L.	Khetpapa	Molluginaceae	Herb	C	July-Sep
<i>Momordica carantia</i> L.	Korola	Cucurbitaceae	Clim	C	May-Aug
<i>Momordica dioica</i> Roxb.	Kakrol	Cucurbitaceae	Clim	C	July-Dec
<i>Monochoria hastata</i> (L.) Solm.	Baranukha	Pontederiaceae	Herb	C	Jan-Dec
<i>Monochoria vaginalis</i> (Burm. f.) Presl.	Sarkachu	Pontederiaceae	Herb	C	Jan-Dec
<i>Moringa oleifera</i> Lamk.	Sojna	Moringaceae	Tree	C	Jan-May
<i>Morus indica</i> L.	Tut	Moraceae	Tree	C	May-Jul
<i>Murraya paniculata</i> (L.) Jack	Kamini	Rutaceae	Shrub	C	Mar-Oct
<i>Musa sapientum</i> L.	Kola	Musaceae	Shrub	C	Jan-Dec
<i>Mussaenda erythrophylla</i> Schum. et Thonn.	Mucenda	Rubiaceae	Shrub	C	Jan-Dec
<i>Najas graminea</i> Delile.	Najas	Najadaceae	Herb	C	Jan-Dec
<i>Nerium indicum</i> Mill.	Korobi	Apocynaceae	Shrub	C	Jan-May
<i>Nicotiana plumbaginifolia</i> Viv.	Bontamak	Solanaceae	Herb	C	Mar-Nov
<i>Nyctanthes arbortristis</i> L.	Sheuli	Verbenaceae	Tree	C	Oct-Feb
<i>Nymphaea nouchali</i> Burm. f.	Shapla	Nymphaeaceae	Herb	C	Jun-Aug
<i>Nymphoides indicum</i> (L.) Kuntz.	Panchuli	Menyanthaceae	Herb	C	Jan-Dec
<i>Ocimum basilicum</i> L.	Babuitulsi	Lamiaceae	Shrub	C	Jan-Dec
<i>Ocimum sanctum</i> L.	Tulsi	Lamiaceae	Shrub	C	Jan-Dec
<i>Oplismenus compositus</i> (L.) P.Beauv.	Gohur	Poaceae	Herb	C	Jan-Dec
<i>Opuntia microdasys</i> (Lehm.) Pfeiff.	Bunny Ears	Cactaceae	Herb	T	Jul-Aug
<i>Orbea semota</i> (N.E. Br.) L.C. Leach	Taraphul	Asclepiadaceae	Herb	T	Mar-Oct
<i>Oroxylum indicum</i> Vent.	Sona	Bignoniaceae	Tree	R	May-July
<i>Oryza sativa</i> L.	Dhan	Poaceae	Herb	C	July-Sep
<i>Ottelia alismoides</i> (L.) Pers.	Panikala	Hydrocharitaceae	Herb	C	Jan-Dec
<i>Oxalis corniculata</i> L.	Amrul	Oxalidaceae	Herb	C	Sep-Mar
<i>Oxalis hedysaroides</i> Kunth.	Butterfly	Oxalidaceae	Herb	T	Jan-Dec
<i>Oxalis rubra</i> DC.	Amrul	Oxalidaceae	Herb	C	Feb-Mar

(Contd...)

Table 2: (Continued)

Scientific name	Local name	Family name	Habit	Relative occurrence	Flowering time
<i>Paederia foetida</i> L.	Gandhabhaduli	Rubiaceae	Clim	C	Jan-Dec
<i>Panicum repens</i> L.	Dhanighas	Poaceae	Herb	C	Jan-Dec
<i>Parthenium hysterophorus</i> L.	Parthenium	Asteraceae	Herb	C	Jan-Dec
<i>Passiflora foetida</i> L.	Jhumkolata	Passifloraceae	Clim	R	Jan-Dec
<i>Peltophorum pterocarpum</i> Baker ex Heyne	Radhachura	Caesalpiniaceae	Tree	C	Apr-Aug
<i>Peperomia pellucid</i> Kunth.	Peperomia	Piperaceae	Herb	C	Jan-Dec
<i>Peperomia prostrata</i> Thunb.	Prostrate	Piperaceae	Herb	T	Mar-Apr
<i>Persicaria barbatum</i> L.	Beklumjubaz	Polygonaceae	Herb	C	Jan-Dec
<i>Persicaria hydropiper</i> L.	Panimorich	Polygonaceae	Herb	C	Jan-Dec
<i>Persicaria limbata</i> (Meissn.) Hara.	Panimorich	Polygonaceae	Herb	C	Jan-Dec
<i>Persicaria orientale</i> L.	Boro Panimorich	Polygonaceae	Herb	C	Jan-Dec
<i>Polygonum plebejum</i> Br.	Rani Phul	Polygonaceae	Herb	C	Jan-Dec
<i>Phoenix sylvestris</i> (L.) Roxb.	Khejur	Arecaceae	Tree	C	Dec-May
<i>Phyllanthus acidus</i> (L.) Skeels	Horiphal	Euphorbiaceae	Tree	C	Jan-Dec
<i>Phyllanthus emblica</i> L.	Amloki	Euphorbiaceae	Tree	C	Mar-May
<i>Phyllanthus niruri</i> L.	Bhuiamla	Euphorbiaceae	Herb	C	Jan-Dec
<i>Phyllanthus reticulatus</i> L.	Chitki	Euphorbiaceae	Shrub	C	Mar-Aug
<i>Phyllanthus urinaria</i> L.	Hazarmani	Euphorbiaceae	Herb	C	Jan-Dec
<i>Physalis minima</i> L.	Kopalfotka	Solanaceae	Herb	C	Jan-Dec
<i>Pilea microphylla</i> L.	Gunpowder Plant	Urticaceae	Herb		Aug-Nov
<i>Pilea serpyllacea</i> Kunth.	Unkwon	Urticaceae	Herb	C	Aug-Nov
<i>Piper nigrum</i> L.	Golmorich	Piperaceae	Clim	R	Jan-Dec
<i>Pistia stratiotes</i> L.	Pistia	Araceae	Herb	C	Jan-Dec
<i>Pithecellobium dulce</i> Benth.	Jilapiphol	Mimosaceae	Herb	C	Jan-Dec
<i>Plumeria acutifolia</i> Poir.	Lalkat-golap	Apocynaceae	Tree	C	Jan-Dec
<i>Plumeria rubra</i> L.	Kat-golap	Apocynaceae	Tree	C	Jan-Dec
<i>Pogostemon reflexus</i> Benth.	Unknown	Lamiaceae	Shrub	C	Jan-Dec
<i>Polyalthia longifolia</i> Benth & Hook	Debdaru	Annonaceae	Tree	C	Mar-Oct
<i>Portulaca oleracea</i> L.	Baranunia	Portulacaceae	Herb	C	May-Jul
<i>Portulaca quadrifida</i> L.	Chotonunia	Portulacaceae	Herb	C	Jan-Dec
<i>Potamogeton mucronatus</i> Presl.	Potamogeton	Potamogetonaceae	Herb	C	Jan-Dec
<i>Pouzalzia zeylanica</i> (L.) Benn.	Unknown	Urticaceae	Herb	C	May-Sep
<i>Psidium guajava</i> L.	Peyara	Myrtaceae	Tree		Jan-Dec
<i>Pterospermum acerifolium</i> (L.) Willd.	Kanak champa	Sterculiaceae	Tree	R	Feb-Apr
<i>Punica granatum</i> L.	Dalim	Punicaceae	Shrub	C	Jan-Aug
<i>Putranjiva Roxburghii</i> L.	Putranjiva	Euphorbiaceae	Tree	C	Apr-Sep
<i>Quisqualis indica</i> L.	Madhabilata	Combretaceae	Shrub	C	Jan-Dec
<i>Ranunculus sceleratus</i> L.	Podika	Ranunculaceae	Herb	C	June-Sep
<i>Raphanus sativus</i> L.	Mula	Brassicaceae	Herb	C	Jan-Mar
<i>Rauvolfia tetraphylla</i> L.	Bara Chadar	Apocynaceae	Shrub	C	Jan-Dec
<i>Rauvolfia serpentina</i> (L.) Benth.	Sarpagandha	Apocynaceae	Shrub	C	Jan-Dec
<i>Ravenala madagascariensis</i> Gmel.	Panthapadap	Strelitziaceae	Shrub	C	Jan-Dec
<i>Ricinus communis</i> L.	Bherenda	Euphorbiaceae	Shrub	C	Jan-Dec
<i>Rorippa indica</i> (L.) Hiern.	Unknown	Brassicaceae	Herb	C	Mar-Apr
<i>Rosa centifolia</i> L.	Golap	Rosaceae	Shrub	C	Jan-Dec
<i>Rosa damascene</i> Mill.	Kanta golap	Rosaceae	Shrub	C	Jan-Dec
<i>Ruellia prostrata</i> Poir.	Chatpotey	Acanthaceae	Herb	C	Jan-Dec
<i>Rumex dentatus</i> L.	Bon Palong	Polygonaceae	Herb	C	July-Aug
<i>Rumex maritimus</i> L.	Bon Palong	Polygonaceae	Herb	C	July-Aug
<i>Rumex vesicarius</i> L.	Chukapalong	Polygonaceae	Herb	C	July-Aug
<i>Rungia pectinata</i> (L.) Nees.	Pindi	Acanthaceae	Herb	C	Nov-May
<i>Rungia repens</i> (L.) Nees.	Par-patha	Acanthaceae	Herb	C	Jan-Dec
<i>Saccharum officinarum</i> L.	Aakh	Poaceae	Shrub	C	Jan-Dec
<i>Saccharum spontaneum</i> L.	Kash	Poaceae	Shrub	C	June-July
<i>Salix tetrasperma</i> Roxb.	Pani jhoma	Salicaceae	Tree	R	July-Aug
<i>Samanea saman</i> (Jacq.) Merr.	Rain tree	Fabaceae	Tree	C	Jan-Dec
<i>Scirpus articulatus</i> (L.) Palla.	Chechur	Cyperaceae	Herb	C	Jan-Dec
<i>Scirpus grossus</i> L.	Kesur	Cyperaceae	Clim	C	Jan-Dec
<i>Scoparia dulcis</i> L.	Bondone	Scrophulariaceae	Herb	C	Jan-Dec
<i>Senna alata</i> L.	Dadmardan	Caesalpiniaceae	Shrub	C	Jan-Dec
<i>Senna occidentalis</i> L.	Chakunda	Caesalpiniaceae	Shrub	C	Jan-Dec
<i>Senna siamea</i> Lamk.	Minjuri	Caesalpiniaceae	Tree	C	Nov-Dec
<i>Senna sophera</i> L.	Kalkashundha	Caesalpiniaceae	Shrub	C	Jan-Dec
<i>Senna tora</i> L.	Kalkashundha	Caesalpiniaceae	Shrub	C	Jan-Dec
<i>Sesamum indicum</i> L.	Til	Pedaliaceae	Herb	C	Feb-June
<i>Sesbania cannabina</i> (Retz.) Poir.	Dhonche	Fabaceae	Shrub	C	Mar-July
<i>Setaria glauca</i> (L.) Beauv.	Kaon	Poaceae	Herb	C	Jan-Dec
<i>Sida acuta</i> Burm. f.	Berela	Malvaceae	Shrub	C	Sep-Oct
<i>Sida cordata</i> (Burm. f.) Borss	Unknown	Malvaceae	Herb	C	Jan-Apr

(Contd..)



Table 2: (Continued)

Scientific name	Local name	Family name	Habit	Relative occurrence	Flowering time
<i>Sida cordifolia</i> L.	Pitberela	Malvaceae	Herb	C	Sep-Oct
<i>Smilax zeylanicam</i> L.	Kumirilota	Smilacaceae	Clim	C	July-Jan
<i>Solanum filisifolium</i> Ort.	Titbegun	Solanaceae	Shrub	C	Jan-Dec
<i>Solanum indicum</i> L.	Phutki	Solanaceae	Herb	C	Oct-Feb
<i>Solanum melongena</i> L.	Begun	Solanaceae	Shrub	C	Oct-Feb
<i>Solanum nigrum</i> L.	Kakmachi	Solanaceae	Herb	C	Jan-Dec
<i>Solanum surattense</i> Burm. f.	Kantikari	Solanaceae	Shrub	C	Jan-Dec
<i>Solanum torvum</i> Sw.	Gothbegun	Solanaceae	Shrub	C	Jan-Aug
<i>Solanum tuberosum</i> L.	Gol-alu	Solanaceae	Herb	C	Oct-Feb
<i>Solanum verbascifolium</i> L.	Bonbagun	Solanaceae	Shrub	C	Jan-Dec
<i>Sonchus arvensis</i> L.	Ban Palang	Asteraceae	Herb	C	Jan-Dec
<i>Sonchus asper</i> L.	Ban Palang	Asteraceae	Herb	C	Jan-Dec
<i>Sonchus wightianus</i> DC.	Ban Palang	Asteraceae	Herb	C	Jan-Dec
<i>Spathodea campanulata</i> Beauv.	Unkwone	Bignoniaceae	Tree	R	Feb-Apr
<i>Spathoglottis plicata</i> Blume.	Ground orchid	Orchidaceae	Herb	T	Sept-Apr
<i>Spilanthes calva</i> DC. in Wight.	Surja Kannya	Asteraceae	Herb	C	Jan-Dec
<i>Spondius pinnata</i> (L. f.) Kurz.	Aamra	Anacardiaceae	Tree	C	Feb-June
<i>Spondius purpurea</i> L.	Bilatiamra	Anacardiaceae	Tree	T	Mar-July
<i>Stephania japonica</i> Thumb.	Aknadi	Menispermaceae	Clim	C	Jan-Oct
<i>Sterculia foetida</i> L.	Box badam	Sterculiaceae	Tree	R	Jan-Dec
<i>Streblus asper</i> Lour.	Shahara	Moraceae	Tree	C	Feb-Apr
<i>Swietenia mahagoni</i> (L.) Jacq.	Mehogoni	Meliaceae	Tree	C	Apr-Sep
<i>Synedrella nodiflora</i> (L.) Gaertn.	Marhatitiga	Asteraceae	Herb	C	Jan-Dec
<i>Syzygium cumini</i> L.	Jam	Myrtaceae	Tree	C	Mar-Apr
<i>Syzygium fruticosum</i> (Roxb.) DC	Khudijam	Myrtaceae	Tree	C	Mar-Apr
<i>Syzygium jambos</i> (L.) Alston.	Golapjam	Myrtaceae	Tree	T	Mar-May
<i>Syzygium samarangense</i> Merr. & Perr	Jamrul	Myrtaceae	Tree	C	Feb-Mar
<i>Tabebuia rosea</i> (Bertol.) DC.	Tabebuia	Bignoniaceae	Tree	R	Jan-Dec
<i>Tabernaemontana coronaria</i> (Jacq.) Willd.	Togor	Apocynaceae	Shrub	R	Apr-Sep
<i>Tagetes patula</i> L.	Gendaphul	Asteraceae	Herb	C	Nov-Feb
<i>Tamarindus indica</i> L.	Tetul	Caesalpinaceae	Tree	C	Jan-May
<i>Tecoma stans</i> (L.) Juss. ex H.B.K.	Sonapati	Bignoniaceae	Tree	T	Jan-Dec
<i>Tectona grandis</i> L. f.	Shegun	Verbenaceae	Tree	C	Jun-Aug
<i>Terminalia arjuna</i> (Roxb. ex DC)	Arjun	Combretaceae	Tree	C	Apr-Jul
<i>Terminalia bellirica</i> (Gaertn.) Roxb.	Bohera	Combretaceae	Tree	C	Oct-Nov
<i>Terminalia catappa</i> L.	Kathbadam	Combretaceae	Tree	C	Mar-May
<i>Terminalia chebula</i> Retz.	Haritaki	Combretaceae	Tree	C	May-Jun
<i>Thespesia populnea</i> (L.) Soland. ex Corrêa.	Paras pipol	Malvaceae	Tree	C	Jan-Dec
<i>Thevetia peruviana</i> Pers.	Haldekorobi	Apocynaceae	Tree	C	Jan-Dec
<i>Thladiantha cordifolia</i> (Blume) Cogn.	Unknown	Cucurbitaceae	Clim	T	Jan-Dec
<i>Thunbergia grandiflora</i> Roxb.	Nillata	Acanthaceae	Clim	T	Jan-Dec
<i>Thyphonium trilobatum</i> (L.) Schott	Gher Kochu	Araceae	Herb	C	May-Oct
<i>Tinospora cordifolia</i> Willd.	Gulancha	Menispermaceae	Clim	C	Jan-Mar
<i>Toona ciliata</i> Roem.	Pia	Meliaceae	Tree	C	Jan-Dec
<i>Tragia involucreta</i> L.	Bichuti	Euphorbiaceae	Herb	T	Jan-Dec
<i>Trema amboinensis</i> Willd.	Gibon	Ulmaceae	Tree	R	May-July
<i>Trewia polycarpa</i> Benth.	Pitali	Euphorbiaceae	Tree	C	Jan-Dec
<i>Trichosanthes anguina</i> L.	Chichinga	Cucurbitaceae	Clim	C	Apr-Jun
<i>Trichosanthes bracteata</i> Lam.	Makal	Cucurbitaceae	Clim	T	Apr-Aug
<i>Trichosanthes dioica</i> Roxb.	Potol	Cucurbitaceae	Clim	C	Apr-Aug
<i>Tridax procumbens</i> L.	Tridhara	Asteraceae	Herb	C	Jan-Dec
<i>Triticum aestivum</i> L.	Gom	Poaceae	Herb	C	Jan-Dec
<i>Typha elephantina</i> Roxb.	Hogla	Typhaceae	Herb	R	Jan-Dec
<i>Uraria picta</i> Desv.	Sankarjata	Fabaceae	Herb	C	Jan-Dec
<i>Urena lobata</i> L.	Banokra	Malvaceae	Herb	C	Jan-Dec
<i>Utricularia aurea</i> Lour.	Jhangi	Lentibulariaceae	Herb	T	Jan-Dec
<i>Vallisneria spiralis</i> L.	Bicha	Hydrocharitaceae	Herb	T	Jan-Dec
<i>Vanda roxburghii</i> R. Br.	Rasna	Orchidaceae	Clim	T	Jan-Dec
<i>Vandellia multiflora</i> Auktor (Roxb.) G. Don.	Unknown	Scrophulariaceae	Herb	C	Dec-Mar
<i>Vernonia cinerea</i> (L.) Less	Kukshim	Asteraceae	Herb	C	Jan-Dec
<i>Vernonia patula</i> (Dryand.) Merr.	Kukshim	Asteraceae	Herb	C	Jan-Dec
<i>Vetiveria zizanioides</i> (L.) Nash.	Bena	Poaceae	Herb	C	Jan-Dec
<i>Vicia faba</i> L.	Barasim	Fabaceae	Herb	C	Jan-Dec
<i>Vicia hirsuta</i> (L.) Gray	Masurchana	Fabaceae	Herb	C	Jan-Dec
<i>Vicia sativa</i> L.	Ankari	Fabaceae	Herb	C	Jan-Dec
<i>Vigna mungo</i> (L.) Hepper	Mashkalai	Fabaceae	Herb	C	Nov-Jan
<i>Vigna sinensis</i> (L.) Endl.	Borbote	Fabaceae	Clim	C	Apr-Jun
<i>Vitex nigundo</i> L.	Nisinda	Verbenaceae	Shrub	R	May-Aug

(Contd...)

Table 2: (Continued)

Scientific name	Local name	Family name	Habit	Relative occurrence	Flowering time
<i>Vitis quadrangularis</i> Wall.	Harjora	Vitaceae	Clim	C	June-Jan
<i>Vitis trifolia</i> L.	Banangur	Vitaceae	Clim	C	May-July
<i>Wedelia chinensis</i> (Osbeck) Merr.	Kesraj	Asteraceae	Herb	R	Jan-Dec
<i>Wedelia trilobata</i> (L.) Hitchc.	Kesraj	Asteraceae	Herb	C	Jan-Dec
<i>Withania somnifera</i> Dunal.	Ashagandha	Solanaceae	Shrub	R	Jan-Dec
<i>Xanthium indicum</i> Koenig.	Ghagra	Asteraceae	Herb	C	Jan-Dec
<i>Youngia japonica</i> (L.) DC.	Oochunti	Asteraceae	Herb	C	Jan-Dec
<i>Zea mays</i> L.	Vutta	Poaceae	Herb	C	Mar-May
<i>Zephyranthus candida</i> L.	Sada lili	Liliaceae	Herb	C	Apr-Oct
<i>Zephyranthus grandiflora</i> Lindl.	Golapi lili	Liliaceae	Herb	C	Apr-Oct
<i>Zephyranthus tubispatha</i> (L'Hér.) Traub.	Holud lili	Liliaceae	Herb	C	Apr-Oct
<i>Zeuxine sulcata</i> (Roxb.) Lindley	Shwet-huli	Orchidaceae	Herb	C	Jan-Dec
<i>Zingiber officinale</i> Rosc.	Ada	Zingiberaceae	Herb	C	Mar-Aug
<i>Zinnia elegans</i> Jacq.	Zinnia	Asteraceae	Herb	C	Nov-Mar
<i>Zizyphus mauritiana</i> Mill.	Boroi	Rhamnaceae	Tree	C	Sep-Jan

Jan: January, Feb: February, Mar: March, Apr: April, May: May, Jun: June, Jul: July, Aug: August, Sep: September, Oct: October, Nov: November, Dec: December, Clim: Climber, C: Common, R: Rare, T: Threatened

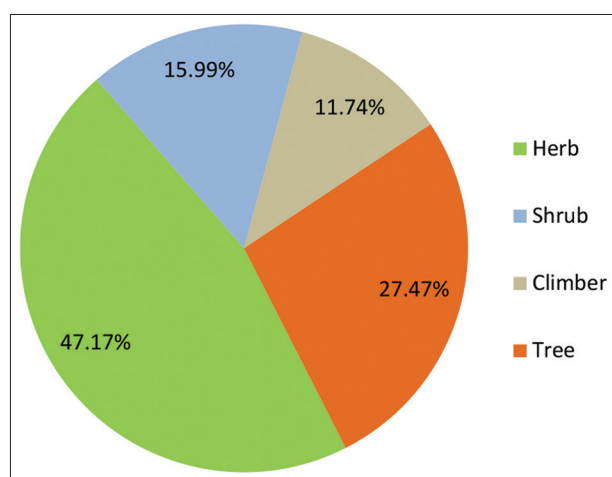


Fig. 1: Habit diversity of the recorded species

Distribution of angiosperm species in the families shows variation. The family Lamiaceae and Verbenaceae are represented by nine species. The family Cucurbitaceae is represented by 19 species. The family Solanaceae and Fabaceae are represented by 16 species and 25 species. Poaceae is represented by 18 species. Each of Moraceae and Apocynaceae is represented by ten species and 12 species. Amaranthaceae is represented by 14 species. The family Asteraceae is represented by 37 species. Each of Convolvulaceae and Cactaceae is represented by 11 species and five species (Table 1).

The following species are found rarely distributed in the study area *Abrus precatorius* L, *Artocarpus lacucha* Roxb, *Bacopa monnieri* (L.) Pennel, *Barringtonia acutangula* (L.) Gaertn, *Bixa orellana* L, *Calamus rotang* L, *Calystegia hederacea* Wall, *Careya arborea* Roxb, *Casearia graveolens* Dalz, *Casearia vareca* Roxb, *Ceiba pentandra* (L.) Gaertn, *Cinnamomum tamala* (Buch.-Ham.) T. Nees and Eberm, *Cinnamomum verum* J. Presl, *Coix lachryona-jobi* L, *Cordia sebestena* L, *Costus speciosus* (Koenig ex Retz.) Smith, *Couroupita guianensis* Aubl, *Curcuma amada* Roxb, *Cyathula prostrata* (L.) Blume, *Cymbopogon citratus* (DC. ex Nees) Stapf, *Digera muricata* (L.) Mart, *Dillenia indica* L, *Gloriosa superba* L, *Gmelina arborea* Roxb, *Grewia subinaequalis* DC, *Haldina cordifolia* (Roxb.) Rid, *Holarrhena antidysenterica* Wall, *Houttuynia cordata* Thunb, and *Hylocereus undatus* (Haw.) Britton and Rose, *Ichnocarpus frutescens* (L.) R. Br, *Kigelia pinnata* (Jacq.) DC, *Litsea monopetala* (Roxb.) Pers, *Mallotus philippensis* (Lam.) Mull.Arg, *Mentha arvensis* L, *Michelia champaca* L, *Oroxylum indicum* Vent, *Passiflora foetida* L, *Piper nigrum* L, *Pterospermum acerifolium* (L.) Willd, *Salix tetrasperma*

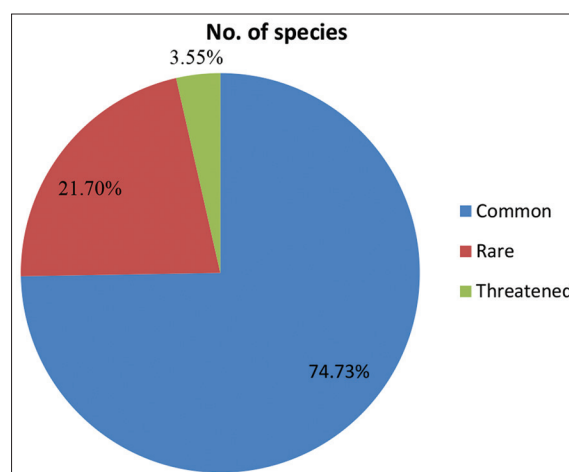


Fig. 2: Recorded Common, Rare, and Threatened species in the study area

Roxb, *Spathodea campanulata* Beauv, *Sterculia foetida* L, *Tabebuia rosea* (Bertol.) DC, *Tabernaemontana coronaria* (Jacq.) Willd, *Trema amboinensis* Willd, *Typha elephantina* Roxb, *Vitex nigundo* L, *Wedelia chinensis* (Osbeck) Merr, and *Withania somnifera* Dunal (Table 1). Out of the recorded species, 74.73% were common, 21.70% were rare, and 3.55% were threatened species in the study area (Fig. 2).

## DISCUSSION

Based on this study, a preliminary list of angiosperm diversity at Rajshahi metropolitan area of Bangladesh conducted during February 2016–March 2017. A total of 494 species belonging to 455 genera under 106 families were recorded. The collected information is comparable with the result of other studies in Bangladesh. A total of 243 species belonging to 195 genera under 95 families were recorded in Khagrachhari district [5]. A total of 374 species belonging to 264 genera under 84 families were recorded in Lawachara National Park [33]. A total of 153 species belonging to 120 genera under 52 families were recorded in Runcitia Sal Forest [30]. A total of 245 species belonged to 183 genera and 72 families are documented in Habiganj district [49]. A total of 425 species belonging to 321 genera 108 families are recorded in Rajshahi district [18]. A total of 302 species belonging to 243 genera 84 families are recorded in Bangladesh Police Academy, Rajshahi [23]. No detail previous information recorded on the diversity of angiospermic flora at Rajshahi metropolitan area of Bangladesh.

## CONCLUSION

The present research focused on the angiospermic flora growing throughout the Rajshahi metropolitan area of Bangladesh. A total of 494 species belonging to 455 genera and 106 families were recorded. Observations and group discussions with local people during field visits noted that urbanization, lack of awareness, and invasive plant species were the major threats in declining the explore of angiospermic plants. Therefore, efforts should be undertaken through *ex situ* and *in situ* conservation approaches, public awareness, and habitats protection to ensure for increase diversity of angiospermic plants.

## ETHICAL APPROVAL

Angiospermic flora from Rajshahi metropolitan area of Bangladesh was observed in this study. The ethical guidelines for plants and plant materials are followed in the study for sample collection and identification.

## INFORMED CONSENT

Not applicable.

## DATA AND MATERIAL AVAILABILITY

All data associated with this study are present in the paper.

## ACKNOWLEDGMENTS

The authors are grateful to the local people at Rajshahi metropolitan area, Bangladesh, for their cooperation and help during the research work.

## CONFLICTS OF INTERESTS

The authors declare that there are no conflicts of interests.

## FUNDING

The study has not received any external funding.

## REFERENCES

- Lindley J. Introduction to the Natural System of Botany. London, UK: Longman; 1830.
- Debnath A, Rahman AH. A checklist of angiosperm taxa at the village pandit para under palash upazila of Narsingdi District, Bangladesh with special importance to medicinal plants. *Species* 2017;18:23-41.
- Islam M, Rahman AH. A preliminary taxonomic account of the family *Araceae* in Rajshahi District of Bangladesh. *Discovery* 2017;53:30-48.
- Islam MJ, Rahman AH. An assessment of the family *Asteraceae* at shadullapur upazila of Gaibandha District, Bangladesh with particular reference to medicinal plants. *J Progress Res Biol* 2016;2:108-18.
- Islam MR, Uddin MZ, Hassan MA. An assessment of the angiosperm flora of Ramgarh Upazilla of Khagrachhari District, Bangladesh. *Bangladesh J Plant Taxon* 2009;16:115-40.
- Keya MA, Rahman AH. Angiosperm diversity at the Village Sabgram of Bogra, Bangladesh with emphasis on medicinal plants. *Am J Plant Biol* 2017;2:25-34.
- Kona S, Rahman AH. An assessment of angiosperm diversity at Mahadebpur Upazila of Naogaon District, Bangladesh. *Int J Adv Res* 2015;3:1067-86.
- Nahar J, Rahman AH. Floristic diversity of Naogaon Sadar, Bangladesh with special reference to medicinal plants. *Discovery* 2016;52:2352-68.
- Rahman AH, Akter M. Taxonomy and medicinal uses of *Euphorbiaceae* (Spurge) family of Rajshahi, Bangladesh. *Res Plant Sci* 2013;1:74-80.
- Rahman AH, Debnath A. Angiosperm diversity of Pandit Para village under Palash Upazila of Narsingdi District, Bangladesh. *Front Biol Life Sci* 2014;2:98-105.
- Rahman AH, Gulshana MI. Taxonomy and medicinal uses on *Amaranthaceae* family of Rajshahi, Bangladesh. *Appl Ecol Environ Sci* 2014;2:54-9.
- Rahman AH, Jamila M. An assessment of angiosperm taxa at the village Jamtala under sadar Upazila of Chapai Nawabganj District, Bangladesh. *Res Rev J Bot Sci* 2015;4:13-22.
- Rahman AH, Keya MA. Assessment of angiosperm flora at the village Sabgram under Sadar Upazila of Bogra District, Bangladesh. *Int J Adv Res* 2014;2:443-58.
- Rahman AH, Mamun MA. Investigation and taxonomic studies of angiosperm weed flora in the mulberry field of Rajshahi University Campus. *Species* 2017;18:42-56.
- Rahman AH, Parvin MI. Taxonomic studies on the family *Fabaceae* (Weeds) at Rajshahi University Campus. *Plant* 2015;3:20-5.
- Rahman AH, Rahman MM. An enumeration of angiosperm weeds in the paddy field of Rajshahi, Bangladesh with emphasis on medicinal plants. *J Appl Sci Res* 2014;2:36-42.
- Rahman AH, Rojonigondha R. Taxonomy and traditional medicine practices on *Malvaceae* (Mallow Family) of Rajshahi, Bangladesh. *Open J Bot* 2014;1:19-24.
- Rahman AH. Angiospermic flora of Rajshahi district, Bangladesh. *Am J Life Sci* 2013;1:105-12.
- Rahman AH. Annotated list in the graveyards trees of Rajshahi City, Bangladesh. *Discovery* 2017;53:107-16.
- Rahman AH. A preliminary assessment of angiospermic flora in and around Rajshahi metropolitan city, Bangladesh. *Appl Ecol Environ Sci* 2021;9:440-9.
- Rahman AH, Alam MS, Hossain MB, Nesa MN, Islam AK, Rahman MM. Study of species diversity on the family *Asteraceae* (Compositae) of the Rajshahi Division. *Res J Agric Biol Sci* 2008;4:794-7.
- Rahman AH, Anisuzzaman M, Ahmed F, Zaman AT, Islam AK. A floristic study in the graveyards of Rajshahi City. *Res J Agric Biol Sci* 2007;3:670-5.
- Rahman AH, Ferdous Z, Islam AK. A preliminary assessment of angiosperm flora of Bangladesh police academy. *Res Plant Sci* 2014;2:9-15.
- Rahman AH, Islam AK, Naderuzzaman AT, Hossain MD, Afza R. Studies on the aquatic angiosperms of the Rajshahi University Campus. *Res J Agric Biol Sci* 2007;3:474-80.
- Roy TR, Rahman AH. Inventory of angiosperm diversity in Ishwardi Pouroshova of Pabna District, Bangladesh. *Discov Sci* 2018;14:9-22.
- Sarker AK, Rahman AH. A preliminary checklist of angiosperm flora at katakhali Pouroshova of Rajshahi, Bangladesh. *Discovery* 2016;52:2127-40.
- Sarker P, Rahman AH. Angiosperms in gobindaganj upazila of Gaibandha District, Bangladesh. *Bangladesh J Plant Taxon* 2019;26:285-98.
- Sarker U, Rahman AH. Diversity of weed species in mustard fields of manda upazila of Naogaon District, Bangladesh. *Species* 2017;18:133-45.
- Sultana R, Rahman AH. *Convolvulaceae*: A taxonomically and medicinally important morning glory family. *Int J Bot Stud* 2016;1:47-52.
- Tutul E, Uddin MZ, Rahman MO, Hassan MA. Angiospermic flora of runcia sal forest, Bangladesh. II. *Magnoliopsida* (Dicots). *Bangladesh J Plant Taxon* 2010;17:33-54.
- Uddin K, Rahman AH, Islam AK. Taxonomy and traditional medicine practices of *Polygonaceae* (Smartweed) family at Rajshahi, Bangladesh. *Int J Adv Res* 2014;2:459-69.
- Uddin MZ, Alam MF, Rahman MA, Hassan MA. Diversity in angiosperm flora of teknafl wildlife sanctuary, Bangladesh. *Bangladesh J Plant Taxon* 2013;20:145-62.
- Uddin MZ, Hassan MA. Angiosperm diversity of Lawachara National Park (Bangladesh): A preliminary assessment. *Bangladesh J Plant Taxon* 2010;17:9-22.
- Zahra F, Rahman AH. Documentation of angiosperm weed flora in and around Rajshahi Metropolitan City, Bangladesh. *Discov Agric* 2018;4:33-46.
- Nahar J, Rahman AH. Study of angiosperm plant species at sadar Upazila of Naogaon District, Bangladesh. *Discovery* 2016;52:1963-78.
- Rahman AH, Ferdows Z, Nitu SK, Islam AK. Herbaceous plant species in and around Rajshahi Metropolitan City, Bangladesh. *Int J Adv Res* 2015;3:1002-18.
- Easmin MF, Laila AF, Rani R, Rahman AH. *Asteraceae*: A taxonomically and medicinally important sunflower family. *Am Int J Biol Life Sci* 2021;3:1-17.
- Islam MM, Rahman AH. Diversity of weed flora of eight selected crop fields in Joypurhat district of Bangladesh. *Discovery* 2023;59:e15d1017.
- Basar MH, Rahman AH. Aquatic vascular flora at Sadar Upazila of Chapai Nawabganj district, Bangladesh. *Discovery* 2023;59:e17d1019.
- Khatun MS, Khatun ML, Ame MM, Sumona SA, Rahman AH. Documentation of angiospermic plants of Puthia Upazila of Rajshahi and their important medicinal values. *GSC Biol Pharm Sci* 2022;19:258-81.
- Ame MA, Khatun L, Khatun S, Sumona SA, Rahman AH. Investigation

- of aquatic vascular flora at Sadullapur Upazila of Gaibandha District, Bangladesh. *GSC Biol Pharm Sci* 2022;21:175-87.
42. Faria LA, Alam MF, Rahman AH. Diversity of Herbaceous species in the Rajshahi Metropolitan Area of Bangladesh. *Int J Adv Res* 2021;9:553-66.
  43. The Guardian. Rajshahi: The city that Took on Air Pollution - and Won. London: The Guardian; 2016. Available from: <https://www.theguardian.com/world/2016/jun/17/rajshahi-bangladesh-city-air-pollution-won> [Last accessed on 2022 Oct 06].
  44. Ahmed ZU, Begum ZN, Hassan MA, Khondker M, Kabir SM, Ahmad M, *et al.*, editors. *Encyclopedia of Flora and Fauna of Bangladesh*. Dhaka: Asiatic Society of Bangladesh; 2008-2009. p. 6-10.
  45. Hooker JD. *Flora of British India*. Vol. 1-7. London, U.K: L. Reeve and Co. Ltd.; 1877.
  46. Prain D. *Bengal Plants*. Vol. 1-2. Calcutta, India: Botanical Survey of India; 1903.
  47. Huq AM. *Plant Names of Bangladesh*. Dhaka, Bangladesh: Bangladesh National Herbarium, BARC; 1986.
  48. Pasha MK, Uddin SB. *Dictionary of Plant Names of Bangladesh (Vascular Plants)*. Chittagong, Dhaka, Bangladesh: Janokalyan Prokashani; 2013.
  49. Arefin MK, Rahman MM, Uddin MZ, Hassan MA. Angiosperm flora of satchari national Park, Habiganj, Bangladesh. *Bangladesh J Plant Taxon* 2011;18:117-40.