

## ANGIOSPERMIC PLANT DIVERSITY OF SUBARNACHAR UPAZILA IN NOAKHALI, BANGLADESH

NOOR HASSAN SAJIB, S. B. UDDIN<sup>1</sup> AND MD. MANZURUL ISLAM  
*Department of Botany, University of Chittagong, Chittagong 4331, Bangladesh*

### Abstract

The present study has been carried out for the inventory and documentation of the angiospermic plant diversity of Subarnachar Upazila under Noakhali district of Bangladesh. A total of 345 angiosperm species under 257 genera belonging to 87 families has been documented from the study area during March 2010 to October 2012. Of these, Magnoliopsida is represented by 208 genera and 283 species under 68 families, whereas Liliopsida is represented by 49 genera and 62 species under 19 families. In Magnoliopsida, Fabaceae appeared to be the largest family having with 23 species whereas in Liliopsida, Poaceae appeared to be the largest family having with 16 species. Habit analysis showed that herbs, shrubs, trees and climbers were represented by 174, 53, 96 and 22 species respectively. Maximum flowering and fruiting period were recorded in spring (28%) and minimum in summer (12%).

*Key words:* Angiospermic plant diversity, Subarnachar, Noakhali, Bangladesh

### Introduction

Bangladesh is a continuous landmass located at the southeast border of Indian subcontinent. Almost all the land mass is plain between a meter below the sea level of some inland basins and few small elevated strips of about 30 m high above the sea level. About 50% land is considered as flood level wetland during monsoon. Physiognomically the whole of the country is almost sloping down from north to south and intersected with several hundreds of rivers and canals. The land enjoys periodical monsoon under the Indo-Australian climatic province with more or less subtropical and tropical environment. It is endowed with rich flora covering almost every corner of the land. The major visible part of which is mostly flowering plants (Pasha and Uddin 2013).

Subarnachar is one of the traditional and promising upazila in Noakhali district of Bangladesh located at 22°38'-22°45' North and 91°20'-90°58' East. It is bounded by Companiganj and Noakhali Sadar upazila on the north, Hatiya island on the south, Sandwip island on the east and Ramgati upazila on the west (Fig. 1). It is the coastal char regions or newly developed land of Noakhali. The soil of this area is soft, saline and sandy (Mahmud 2007). Canals, ponds and agricultural lands or plain lands become dried in summer whereas most of the areas are flooded in monsoon. As a result, diversified plants including angiospermic plants are found in the area like other parts of the country.

---

<sup>1</sup> Corresponding author: E-mail: roben68@gmail.com

Assessment of angiospermic plant diversity in different areas of Bangladesh has been done by Khan *et al.* (1985), Huq (1988), Alam *et al.* (2006), Islam *et al.* (2009), Uddin and Hassan (2010), Arefin *et al.* (2011) and Rahman *et al.* (2012) respectively. But no such work has been carried out so far for Subarnachar. The present study aims to investigate and document the angiospermic plants of the area.

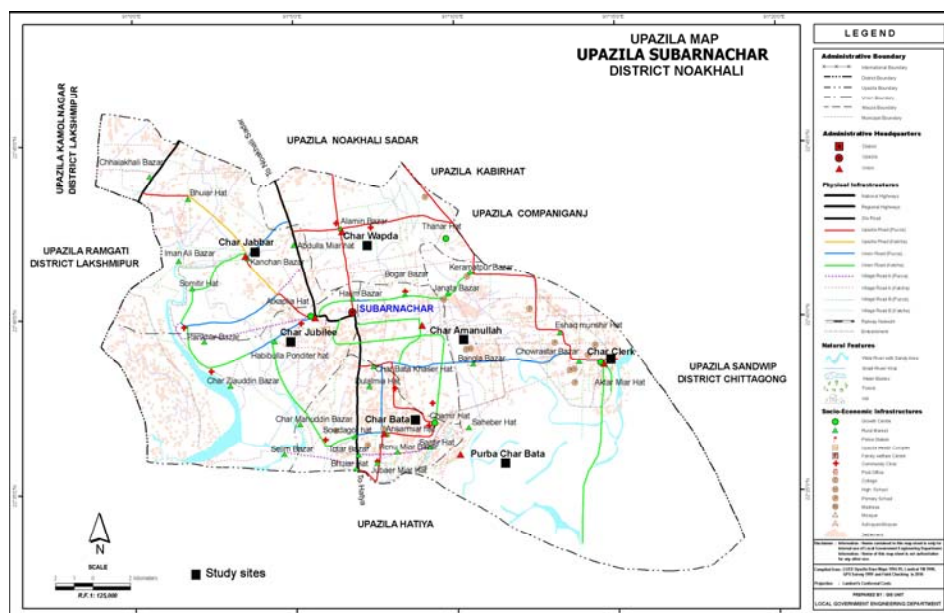


Fig. 1. Map of the study area.

## Materials and Methods

The plant specimens have been collected, identified and documented through repeated field trips during March 2010 to October 2012. Study sites have been selected randomly from all the union area. The fresh materials were collected during different seasons and were brought to the Chittagong University herbarium (CTGUH). Samplings have been made by selecting the seasons in winter, summer, spring and monsoon. Photographs have been taken wherever necessary with a digital camera. The collected plant specimen were dried by using plant press with newspaper, preparation of Herbarium sheet by mounting and labeling of specimen were made following standard herbarium technique. Voucher specimens were preserved, examined and studied carefully in the taxonomic laboratory of CTGUH. Collected specimens were confirmed by comparing with herbarium specimens at Chittagong University Herbarium (CTGUH), Bangladesh Forest Research Institute herbarium (BFRIH) and Bangladesh National Herbarium (BNH). In some cases, standard literatures, such as Hooker (1872-1897), Prain (1903), Siddiqui *et al.* (2007), Ahmed *et*

*al.* (2008-2009), Pasha and Uddin (2013) were consulted for identification purposes. On the other hand, world wide website, Catalogue of Life (2012) and The Plant List (2010) were considered for identification and recent nomenclature of some critical specimens.

### Results and Discussion

In the present study, a total of 345 angiosperm species under 257 genera belonging to 87 families has been documented from the study area. The genera under each family and the species under each genus with local name, habit character, flowering -fruiting time and economic uses are arranged alphabetically (Table 1). The recorded angiosperm species, genera and families are the representative of 6.98%, 15.30% and 39.76% of the total National Flora of Bangladesh respectively (Pasha and Uddin 2013). Magnoliopsida is represented by 68 families, 208 genera and 283 species, whereas Liliopsida is represented by 19 families, 49 genera and 62 species. Magnoliopsida is represented by 78.16% families and 80.93% genera whereas Liliopsida is represented by 21.84% and 19.07% respectively. The angiosperms genus per family, species per family and species per genus represents 2.95, 3.96 and 1.34 whereas in National Flora it is 7.60, 22.55 and 2.96 respectively (Pasha and Uddin 2013). The ratio of Dicotyledons and Monocotyledonous plants is 4.56:1, which did not support the National Flora (2.95:1). This also indicated that representatives of the Liliopsida are much less than the Magnoliopsida compared with the national record.

Ten dominant families with respect to number of species and genera were Fabaceae, Asteraceae, Poaceae, Solanaceae, Euphorbiaceae, Verbenaceae, Cucurbitaceae, Malvaceae, Lamiaceae and Mimosaceae (Fig. 2).

Table 1. List of angiospermic plants of Subarnachar.

| Scientific name                           | Local name        | Family     | Habit | Flowering- fruiting | Economic uses |
|---|-------------------|------------|-------|---------------------|---------------|
| Magnoliopsida (Dicots)                    |                   |            |       |                     |               |
| <i>Abelmoschus esculentus</i> (L.) Moench | Deros, Bhendi     | Malvaceae  | Herb  | Jan-Dec             | V             |
| <i>Abelmoschus moschatus</i> Medik.       | Bannoderos        | Malvaceae  | Herb  | Jul-Dec             | F             |
| <i>Abutilon hirtum</i> (Lam.) Sweet       | Jhumka            | Malvaceae  | Herb  | Oct-Apr             | F             |
| <i>Abutilon indicum</i> (L.) Sweet        | Jhumka            | Malvaceae  | Herb  | Jul-Apr             | F             |
| <i>Acacia auriculiformis</i> Benth.       | Akashi, Akashmoni | Mimosaceae | Tree  | Jun-Feb             | T             |
| <i>Acacia mangium</i> Benth.              | Akashi            | Mimosaceae | Tree  | May-Dec             | T             |

Contd.

| Scientific name   | Local name            | Family         | Habit               | Flowering-<br>fruiting | Economic<br>uses |
|---|-----------------------|----------------|---------------------|------------------------|------------------|
| <i>Acacia nilotica</i> (L.)<br>Delile subsp. <i>indica</i><br>(Benth.) Brenan | Baul                  | Mimosaceae     | Tree                | May-<br>Apr            | T                |
| <i>Acalypha wilkesiana</i><br>Mull.Arg.                                       | Patabahar<br>Kekanta, | Euphorbiaceae  | Shrub               | Dec-Jun                | O                |
| <i>Acanthus illicifolius</i> L.   | Hargoza               | Acanthaceae    | Shrub               | Mar-Jul                | M                |
| <i>Achyranthes aspera</i><br>L.   | Withlangda,<br>Apang  | Amaranthaceae  | Herb                | Jan-Dec                | M                |
| <i>Aegle marmelos</i> (L.)<br>Corr. Serr.                                     | Bel                   | Rutaceae       | Tree                | Apr-Dec                | Fr               |
| <i>Aerva sanguinolenta</i><br>(L.) Blume                                      | Raktahata             | Amaranthaceae  | Herb                | Jan-Dec                | M                |
| <i>Aeschynomene indica</i> L.   | Bhatshola             | Fabaceae       | Shrub               | Jul-Sep                | Fr               |
| <i>Ageratum conyzoides</i><br>(L.) L.   | Fulkuri               | Asteraceae     | Herb                | Nov-Jun                | Fr               |
| <i>Albizia odoratissima</i><br>(L.f.) Benth.                                  | Jatkorai              | Mimosaceae     | Tree                | May-<br>Dec            | T                |
| <i>Albizia procera</i><br>(Roxb.) Benth.                                      | Silkorai              | Mimosaceae     | Tree                | May-Jan                | T                |
| <i>Albizia saman</i> (Jacq.)<br>Merr.   | Fulkorai              | Mimosaceae     | Tree                | Apr-Oct                | T                |
| <i>Alstonia scholaris</i> (L.)<br>R.Br.                                       | Chatim                | Apocynaceae    | Tree                | Nov-<br>May            | M                |
| <i>Alternanthera</i><br><i>philoxeroides</i> (Mart.)<br>Griseb.               | Molicha               | Amaranthaceae  | Herb                | Mar-Jun                | V                |
| <i>Alternanthera sessilis</i><br>(L.) R.Br.ex DC.                             | Sachishak             | Amaranthaceae  | Herb                | Jan-Dec                | V                |
| <i>Amaranthus spinosus</i> L.   | Kantamairra           | Amaranthaceae  | Herb                | Jan-Dec                | M                |
| <i>Amaranthus viridis</i> L.  | Mairrashak            | Amaranthaceae  | Herb                | Jul-Sep                | V                |
| <i>Annona reticulata</i> L.   | Ata                   | Annonaceae     | Tree                | Oct-Jan                | Fr               |
| <i>Annona squamosa</i> L.   | Sharifa               | Annonaceae     | Tree                | Mar-Dec                | Fr               |
| <i>Aphanamixis</i><br><i>polystachya</i> (Wall.)<br>R.Parker                  | Royna                 | Meliaceae      | Tree                | Feb-May                | M                |
| <i>Arachis hypogaea</i> L.  | Chinabadam            | Fabaceae       | Herb                | Mar-Dec                | Fr               |
| <i>Argyreia nervosa</i><br>(Burm.f) Bojer                                     | Guguli                | Convolvulaceae | Herb<br>climb<br>er | May-<br>Dec            | F                |
| <i>Artocarpus</i><br><i>heterophyllus</i> Lam.                                | Kathal                | Moraceae       | Tree                | Feb-Jul                | Fr, T            |
| <i>Artocarpus lacucha</i><br>Buch.-Ham.                                       | Batta                 | Moraceae       | Tree                | Apr-Jun                | Fr, T            |
| <i>Averrhoa bilimbi</i> L.  | Bilimbi               | Oxalidaceae    | Tree                | Oct-Feb                | Fr               |

Contd.

| Scientific name  | Local name          | Family           | Habit | Flowering-<br>fruiting | Economic<br>uses |
|--|---------------------|------------------|-------|------------------------|------------------|
| <i>Averrhoa carambola</i> L.                           | Kamranga            | Oxalidaceae      | Tree  | Sep-Mar                | Fr               |
| <i>Azadirachta indica</i> A.<br>Juss.                  | Nim                 | Meliaceae        | Tree  | Mar-Jul                | M                |
| <i>Bacopa monnieri</i> (L.)<br>Pennell                 | Brammishak<br>Holy, | Scrophulariaceae | Herb  | May-<br>Dec            | M                |
| <i>Basella rubra</i> L.                                | Puishak             | Basellaceae      | Herb  | Nov-<br>Mar            | V                |
| <i>Benincasa hispida</i><br>(Thunb.) Cogn.             | Chalkumra           | Cucurbitaceae    | Herb  | May-<br>Nov            | V                |
| <i>Blumea lacera</i><br>(Burm.f.) DC.                  | Kormuta             | Asteraceae       | Herb  | Nov-Jul                | M                |
| <i>Bombax ceiba</i> L.                                 | Simul,Tula          | Bombacaceae      | Tree  | Jan-Apr                | M                |
| <i>Bougainvillea glabra</i><br>Choisy                  | Baganbilas          | Nyctaginaceae    | Shrub | Jan-Dec                | O                |
| <i>Bougainvillea<br/>spectabilis</i> Willd.            | Baganbilas          | Nyctaginaceae    | Shrub | Feb-Apr                | O                |
| <i>Brassica napus</i> L.                               | Sarisa              | Brassicaceae     | Herb  | Mar-Jul                | Os               |
| <i>Brassica oleracea</i> L.<br>var. <i>botrytis</i> L. | Phulkapi            | Brassicaceae     | Herb  | Feb-Jun                | V                |
| <i>Brassica oleracea</i> var.<br><i>capitata</i> L.    | Bandhakopi          | Brassicaceae     | Herb  | Jan-May                | V                |
| <i>Butea monosperma</i><br>(Lam.) Taub.                | Palash              | Fabaceae         | Tree  | Feb-Apr                | Fu               |
| <i>Cajanus cajan</i> (L.)<br>Millsp.                   | Arol                | Fabaceae         | Shrub | Dec-Apr                | V                |
| <i>Calophyllum<br/>inophyllum</i> L.                   | Hundal              | Clusiaceae       | Tree  | Apr-Oct                | T                |
| <i>Calotropis gigantea</i><br>(L.) Ait.f.              | Akkan,<br>Akanda    | Asclepiadaceae   | Shrub | Jan-Dec                | M                |
| <i>Calotropis procera</i><br>(Aiton) Dryand.           | Akkan               | Asclepiadaceae   | Shrub | May-Jul                | M                |
| <i>Capsicum annuum</i> L.<br>var. <i>annuum</i>        | Marich              | Solanaceae       | Herb  | Jan-Dec                | V                |
| <i>Capsicum frutescens</i> L.                          | Marich              | Solanaceae       | Herb  | Jan-Dec                | V                |
| <i>Carica papaya</i> L.                                | Pepe, kokia         | Caricaceae       | Shrub | Jan-Dec                | V, Fr            |
| <i>Carissa carandas</i> L.                             | Kormocha            | Apocynaceae      | Shrub | Mar-Nov                | Fr               |
| <i>Cassia fistula</i> L.                               | Sonamukhi           | Caesalpiniaceae  | Tree  | Mar-Jun                | T                |
| <i>Casuarina<br/>equisetifolia</i> L.                  | Jhau, Popan         | Casuarinaceae    | Tree  | Nov-<br>Mar            | T                |
| <i>Catharanthus roseus</i><br>(L.) G.Don.              | Nyantara            | Apocynaceae      | Herb  | Jan-Dec                | M                |
| <i>Catunaregam spinosa</i><br>(Thunb.) Tirveng.        | Monkanta            | Rubiaceae        | Shrub | Oct-Jan                | Fr               |

Contd.

| Scientific name   | Local name              | Family         | Habit       | Flowering-<br>fruiting | Economic<br>uses |
|---|-------------------------|----------------|-------------|------------------------|------------------|
| <i>Celosia cristata</i> L.                                  | Morogful                | Amaranthaceae  | Herb        | Jan-Dec                | O                |
| <i>Centella asiatica</i> (L.)<br>Urban                      | Adamkipata,<br>Thankuni | Apiaceae       | Herb        | Mar-Dec                | M                |
| <i>Centrostachys aquatica</i><br>(Roxb.) Wall.              | Thuas                   | Amaranthaceae  | Herb        | Jan-Dec                | V                |
| <i>Cestrum nocturnum</i> L.                                 | Hasnahena               | Solanaceae     | Shrub       | Jan-Dec                | Fl               |
| <i>Chenopodium album</i> L.                                 | Battashak               | Chenopodiaceae | Herb        | Dec-Mar                | V                |
| <i>Chromolaena odorata</i><br>(L.) R.M.King &<br>H.Rob.     | Asamlata                | Asteraceae     | Herb        | Nov-<br>May            | F                |
| <i>Cinnamomum tamala</i><br>(Buch.-Ham.) Nees<br>and Eberm. | Tejpata                 | Lauraceae      | Tree        | Feb-Oct                | S                |
| <i>Citrullus lanatus</i><br>(Thunb.) Matsumura<br>& Nakai   | Tarmuz                  | Cucurbitaceae  | climb<br>er | Mar-Sep                | Fr               |
| <i>Citrus aurantifolia</i><br>(Christm.) Swingle            | Kagazi lebu             | Rutaceae       | Tree        | Mar-Sep                | Fr               |
| <i>Citrus aurantium</i> L.                                  | Kamala                  | Rutaceae       | Tree        | Sep-Jan                | Fr               |
| <i>Citrus limon</i> (L.)<br>Burm.f.                         | Lebu                    | Rutaceae       | Tree        | Mar-<br>Nov            | Fr               |
| <i>Citrus maxima</i><br>(Burm.f.) Merr.                     | Jambura<br>Atha         | Rutaceae       | Tree        | Feb-Nov                | Fr               |
| <i>Cleome viscosa</i> L.                                    | hurhuria                | Capparaceae    | Herb        | Jan-Dec                | F                |
| <i>Clerodendrum<br/>indicum</i> (L.) Kuntze                 | Bamunhati               | Verbenaceae    | Shrub       | Apr-Oct                | F                |
| <i>Clerodendrum inerme</i><br>(L.) Gaertn.                  | Bandulpata              | Verbenaceae    | Shrub       | Jul-Nov                | F                |
| <i>Clerodendrum<br/>viscosum</i> Vent.                      | Bhat                    | Verbenaceae    | Shrub       | Jan-Jul                | F                |
| <i>Clitoria ternatea</i> L.                                 | Aparajita               | Fabaceae       | Herb        | Jun-Mar                | Fl               |
| <i>Coccinia grandis</i> (L.)<br>Voigt                       | Telakucha               | Cucurbitaceae  | climb<br>er | Mar-Dec                | V                |
| <i>Codiaeum variegatum</i><br>(L.) Rumph. ex<br>A.Juss.     | Patabahar               | Euphorbiaceae  | Shrub       | Jan-Dec                | O                |
| <i>Coleus scutellarioides</i><br>(L.) Benth.                | Patabahar               | Lamiaceae      | Herb        | Mar-Sep                | O                |
| <i>Corchorus capsularis</i> L                               | Pat                     | Tiliaceae      | Herb        | Jun-Nov                | Fb               |
| <i>Corchorus olitorius</i> L.                               | Tuchapat                | Tiliaceae      | Herb        | Aug-Dec                | Fb               |
| <i>Coriandrum sativum</i> L.                                | Dhone                   | Apiaceae       | Herb        | Dec-Feb                | S                |

Contd.

| Scientific name  | Local name               | Family          | Habit         | Flowering-<br>fruiting | Economic<br>uses |
|--|--------------------------|-----------------|---------------|------------------------|------------------|
| <i>Crassocephalum<br/>crepidioides</i> (Benth.)<br>S.Moore | Dubbecrepi               | Asteraceae      | Herb          | Sep-May                | F                |
| <i>Crateva magna</i><br>(Lour.) DC.                        | Barun                    | Capparaceae     | Tree          | Jan-Sep                | T                |
| <i>Crotalaria pallida</i><br>Aiton                         | Junjuni                  | Fabaceae        | Herb          | May-<br>Dec            | F                |
| <i>Croton bonplandianus</i><br>Baill.                      | Paglamarich              | Euphorbiaceae   | Herb          | Apr-Sep                | F                |
| <i>Cucumis melo</i> L.                                     | Bangi                    | Cucurbitaceae   | Herb<br>climb | Mar-Oct                | Fr               |
| <i>Cucumis sativus</i> L.                                  | Sasha                    | Cucurbitaceae   | er            | Apr-Oct                | V                |
| <i>Cucurbita maxima</i><br>Duchesne                        | Mistikumra<br>Sunnalata, | Cucurbitaceae   | Herb<br>climb | Mar-Oct<br>Aug-        | V                |
| <i>Cuscuta reflexa</i> Roxb.                               | Sarnalata                | Convolvulaceae  | er            | Mar                    | M                |
| <i>Cyanthillium<br/>cinereum</i> (L.) H.Rob.               | Sialimutra               | Asteraceae      | Herb          | Jan-Dec                | F                |
| <i>Dahlia pinnata</i> Cav.                                 | Dalia                    | Asteraceae      | Herb          | Jan-Mar                | Fl               |
| <i>Dalbergia sissoo</i> DC.                                | Sisoo                    | Fabaceae        | Tree          | Mar-Jun                | T                |
| <i>Datura metel</i> L.                                     | Datura                   | Solanaceae      | Herb          | Jan-Dec<br>May-        | M                |
| <i>Daucus carota</i> L.                                    | Gajor                    | Apiaceae        | Herb          | Aug                    | V                |
| <i>Delonix regia</i> (Hook.)<br>Raf.                       | Krisnachura              | Caesalpiniaceae | Tree<br>climb | Apr-Sep                | T                |
| <i>Derris scandens</i><br>(Roxb.) Benth.                   | Kalla lata               | Fabaceae        | er<br>climb   | Jul-Dec                | Fu               |
| <i>Derris trifoliata</i> Lour.                             | Kalla lata               | Fabaceae        | er            | Mar-Jun                | Fu               |
| <i>Desmodium<br/>triflorum</i> (L.) DC.                    | Kodaliya                 | Fabaceae        | Herb          | Jan-Dec                | F                |
| <i>Dillenia indica</i> L.                                  | Chalta                   | Dilleniaceae    | Tree          | May-Feb                | Fr, T            |
| <i>Diospyros blancoi</i><br>A.DC.                          | Bilatigab                | Ebenaceae       | Tree          | Mar-<br>Aug            | Fr, T            |
| <i>Diospyros malabarica</i><br>(Desr.) Kostel.             | Kassagab                 | Ebenaceae       | Tree          | May-<br>Aug            | Fr, T            |
| <i>Duranta erecta</i> L.                                   | Kantamehedi              | Verbenaceae     | Shrub         | Jan-Dec                | O                |
| <i>Eclipta prostrata</i> (L.) L.                           | Kalakeccha               | Asteraceae      | Herb          | Jan-Dec                | M                |
| <i>Elaeocarpus<br/>floribundus</i> Blume                   | Jalpai                   | Elaeocarpaceae  | Tree          | Mar-Dec                | Fr, T            |
| <i>Emilia sonchifolia</i><br>(L.) DC. ex DC.               | Sadimudi                 | Asteraceae      | Herb          | Jan-Dec                | F                |
| <i>Eryngium foetidum</i> L.                                | Bilati Dhone             | Apiaceae        | Herb          | Apr-Jan                | S                |

Contd.

| Scientific name  | Local name    | Family        | Habit | Flowering-<br>fruiting | Economic<br>uses |
|--|---------------|---------------|-------|------------------------|------------------|
| <i>Erythrina fusca</i> Lour.                                 | Mandar        | Fabaceae      | Tree  | Jan-Jun                | Fu               |
| <i>Erythrina variegata</i> L.                                | Mandar, Madar | Fabaceae      | Tree  | Feb-May                | Fu               |
| <i>Eucalyptus camaldulensis</i> Dehnh.                       | Eucalyptus    | Myrtaceae     | Tree  | Jun-Dec                | T                |
| <i>Euphorbia nerifolia</i> L.                                | Kantamansa    | Euphorbiaceae | Herb  | Jun-Nov                | O                |
| <i>Euphorbia hirta</i> L.                                    | Dudialata     | Euphorbiaceae | Herb  | Jan-Dec                | F                |
| <i>Excoecaria agallocha</i> L.                               | Geowa         | Euphorbiaceae | Tree  | Mar-Jun<br>May-        | Fu               |
| <i>Ficus benghalensis</i> L.                                 | Bat           | Moraceae      | Tree  | Aug                    | F                |
| <i>Ficus erecta</i> Thunb.                                   | Ballagota     | Moraceae      | Shrub | Apr-Jul                | V                |
| <i>Ficus hispida</i> L.f.                                    | Dumur         | Moraceae      | Tree  | Apr-Sep<br>Mar-        | F                |
| <i>Ficus racemosa</i> L.                                     | Jaggodumur    | Moraceae      | Tree  | Nov                    | V                |
| <i>Ficus religiosa</i> L.                                    | Asath, Jil    | Moraceae      | Tree  | Mar-Oct                | F                |
| <i>Garcinia cowa</i> Roxb.<br>ex DC.                         | Kau           | Clusiaceae    | Tree  | Feb-Aug                | Fr               |
| <i>Gardenia jesminoides</i><br>J.Ellis                       | Gondoraj      | Rubiaceae     | Shrub | Mar-Jul                | Fl               |
| <i>Glochidion multiloculare</i> (Rottler<br>ex Willd.) Voigt | Koishtuma     | Euphorbiaceae | Tree  | Jul-Jan                | Fu               |
| <i>Gmelina arborea</i><br>Roxb.                              | Gamar         | Verbenaceae   | Tree  | Feb-Jul                | T                |
| <i>Grangea maderaspatana</i> (L.)<br>Poir.                   | Namuti        | Asteraceae    | Herb  | Dec-<br>May            | F                |
| <i>Helianthus annuus</i> L.                                  | Surjamukhi    | Asteraceae    | Herb  | Jan-Dec                | Fl               |
| <i>Heliotropium curassavicum</i> L.                          | Nona hatisuri | Boraginaceae  | Herb  | Mar-Dec                | F                |
| <i>Heliotropium indicum</i> L.                               | Hatisur       | Boraginaceae  | Herb  | Jan-Dec                | F, M             |
| <i>Hemigraphis hirta</i><br>(Vahl) T.Anderson                | Borati gas    | Acanthaceae   | Herb  | Jan-Jul                | F                |
| <i>Hibiscus rosa-sinensis</i> I                              | Latkonjaba    | Malvaceae     | Shrub | Jan-Dec                | Fl, M            |
| <i>Hibiscus sabdariffa</i> L.                                | Mesoth        | Malvaceae     | Herb  | Nov-Feb                | V                |
| <i>Hygrophila auriculata</i><br>(Schumach.) Heine            | Alicha        | Acanthaceae   | Herb  | Oct-Jan                | M                |
| <i>Hygrophila salicifolia</i><br>(Vahl) Nees                 | Bontil        | Acanthaceae   | Herb  | Nov-<br>Mar            | M                |
| <i>Hyptis brevipes</i> Poit.                                 | Gol tokma     | Lamiaceae     | Herb  | Nov-Jan                | F                |
| <i>Hyptis suaveolens</i> (L.)<br>Poit.                       | Tokma         | Lamiaceae     | Herb  | Jan-Dec                | M                |



Contd.

| Scientific name   | Local name  | Family           | Habit          | Flowering-<br>fruiting | Economic<br>uses |
|---|-------------|------------------|----------------|------------------------|------------------|
| <i>Ipomoea aquatica</i><br>Forssk.                        | Kalmi       | Convolvulaceae   | climb<br>er    | Jan-Dec                | V                |
| <i>Ipomoea batatas</i> (L.)<br>Poir                       | Sagarna alu | Convolvulaceae   | Herb           | Dec-<br>May            | V                |
| <i>Ipomoea fistulosa</i><br>Mart. ex Choisy               | Dulkolmi    | Convolvulaceae   | Shrub<br>climb | Feb-Apr                | H                |
| <i>Ipomoea quamoclit</i> L.                               | Gateful     | Convolvulaceae   | er             | Jul-Sep                | O                |
| <i>Ixora coccinea</i> L.                                  | Rangon      | Rubiaceae        | Shrub          | Jan-Dec                | O                |
| <i>Jasminum sambac</i><br>(L.) Aiton                      | Belly       | Oleaceae         | Shrub          | Mar-Jul                | Fl               |
| <i>Justicia gendarussa</i><br>Burm.f.                     | Jagatmadan  | Acanthaceae      | Shrub          | Dec-<br>May            | M                |
| <i>kalanchoe pinnata</i><br>(Lam.) Pers.                  | Pathorkuchi | Crassulaceae     | Shrub          | Dec-Apr                | M                |
| <i>Lablab purpureus</i> (L.)<br>Sweet                     | Shim        | Fabaceae         | Herb           | Nov-<br>Mar            | V                |
| <i>Lagenaria siceraria</i><br>(Molina) Standl.            | Kadhu       | Cucurbitaceae    | Climb<br>er    | Jan-Dec                | V                |
| <i>Lannea</i><br><i>coromandelica</i><br>(Houtt.) Merr.   | Badi        | Anacardiaceae    | Tree           | Feb-Jun                | Fu               |
| <i>Lantana camara</i> L.                                  | Lantana     | Verbenaceae      | Shrub          | Jan-Dec                | Fu               |
| <i>Laportea interrupta</i><br>(L.) Chew                   | Cutra       | Urticaceae       | Herb           | Aug-<br>Nov            | F                |
| <i>Lathyrus sativus</i> L.                                | Khesari     | Fabaceae         | Herb           | Feb-Sep                | V                |
| <i>Launaea asplenifolia</i><br>(Willd.) Hook.f.           | Tikadana    | Asteraceae       | Herb           | Jan-Aug                | F                |
| <i>Lawsonia inermis</i> L.                                | Methi       | Lythraceae       | Shrub          | Jun-Dec                | M                |
| <i>Leea indica</i> Merr.                                  | Murka       | Leeaceae         | Shrub          | Jul-Jan                | M                |
| <i>Lens culinaris</i> Medik.                              | Masur       | Fabaceae         | Herb           | Dec-Mar                | V                |
| <i>Leonurus sibiricus</i> L.                              | Rakta dron  | Lamiaceae        | Herb           | Jan-Dec                | F                |
| <i>Lepisanthes</i><br><i>rubiginosa</i> (Roxb.)<br>Leenh. | Aul         | Sapindaceae      | Tree           | Nov-<br>May            | T                |
| <i>Leucaena</i><br><i>leucocephala</i> (Lam.)<br>de Wit.  | Ipil        | Mimosaceae       | Tree           | Mar-<br>Nov            | T, F             |
| <i>Leucas aspera</i> (Roth)<br>Spreng.                    | Shetodron   | Lamiaceae        | Herb           | Jan-Dec                | F                |
| <i>Lindernia antipoda</i><br>(L.) Alston                  | Zai gas     | Scrophulariaceae | Herb           | Jan-Dec                | F                |
| <i>Linum usitatissimum</i> L.                             | Tisi        | Linaceae         | Herb           | Feb-Jun                | Os               |

Contd.

| Scientific name  | Local name        | Family        | Habit       | Flowering-<br>fruiting | Economic<br>uses |
|--|-------------------|---------------|-------------|------------------------|------------------|
| <i>Lippia alba</i> (P.Mill.)<br>N.E.Br. ex Britt. &<br>Wilson  | Shunk             | Verbenaceae   | Shrub       | Jan-Dec                | F                |
| <i>Litchi chinensis</i> Sonn.                                  | Lichu             | Sapindaceae   | Tree        | Apr-Jun                | Fr               |
| <i>Litsea monopetala</i><br>(Roxb.) Pers.                      | Meda              | Lauraceae     | Tree        | Mar-<br>Nov            | M, Fu            |
| <i>Ludwigia adscendens</i><br>(L.) Hara                        | Otthuas           | Onagraceae    | Herb        | Mar-Dec                | F                |
| <i>Ludwigia hyssopifolia</i><br>(G.Don) Exell.                 | Panilong          | Onagraceae    | Herb        | Jan-Dec                | F                |
| <i>Luffa cylindrica</i> (L.)<br>M.Roemer                       | Dundul            | Cucurbitaceae | climb<br>er | Jun-Dec                | V                |
| <i>Malus domestica</i><br>Borkh.                               | Apple             | Rosaceae      | Tree        | Aug-Oct                | Fr               |
| <i>Malvaviscus arboreus</i><br>Dill. ex Cav.                   | Marich jaba       | Malvaceae     | Shrub       | Nov-Jan                | O                |
| <i>Mangifera indica</i> L.                                     | Aam               | Anacardiaceae | Tree        | Jan-Jun                | T, Fr            |
| <i>Melia azederach</i> L.                                      | Ghora nim         | Meliaceae     | Tree        | Mar-Feb                | T                |
| <i>Melilotus albus</i><br>Medik.                               | Sada methi        | Fabaceae      | Herb        | Feb-Apr                | F                |
| <i>Mentha arvensis</i> L.                                      | Pudina            | Lamiaceae     | Herb        | Not rec                | M                |
| <i>Mentha viridis</i> L.                                       | Pudina            | Lamiaceae     | Herb        | Not rec                | M                |
| <i>Meyna spinosa</i> Roxb.<br>ex Link                          | Marbel            | Rubiaceae     | Tree        | Feb-Jun                | Fr               |
| <i>Mikania micrantha</i><br>Kunth                              | Hakistani<br>lata | Asteraceae    | climb<br>er | Oct-Feb                | F                |
| <i>Mimosa himalayna</i><br>Gamble                              | Boro<br>Sarmida   | Mimosaceae    | Shrub       | Jul-Feb                | M                |
| <i>Mimosa pudica</i> L.  | Sarmida           | Mimosaceae    | Herb        | Sep-Dec                | M                |
| <i>Mimusops elengi</i> L.                                      | Bakul             | Sapotaceae    | Tree        | Mar-Jun                | T                |
| <i>Momordica charantia</i><br>L. var. <i>charantia</i>         | Titkorola         | Cucurbitaceae | climb<br>er | May-Oct                | V                |
| <i>Momordica</i><br><i>cochinchinensis</i><br>(Lour.) Sprengel | Akri              | Cucurbitaceae | er          | Jul-Nov                | V                |
| <i>Morinda citrifolia</i> L.                                   | Rangkathal        | Rubiaceae     | Tree        | May-Nov                | Fu               |
| <i>Moringa oleifera</i><br>Lam.                                | Sajina            | Moringaceae   | Tree        | Oct-Mar                | V, M             |
| <i>Murraya paniculata</i><br>(L.) Jack                         | Kamini            | Rutaceae      | Tree        | Mar-Jan                | Fl               |
| <i>Nelsonia canescens</i><br>(Lam.) Spreng.                    | Paramul           | Acanthaceae   | Herb        | Oct-Feb                | F                |

Contd.

| Scientific name   | Local name   | Family        | Habit | Flowering-<br>fruiting | Economic<br>uses |
|---|--------------|---------------|-------|------------------------|------------------|
| <i>Neolamarckia</i><br><i>cadamba</i> (Roxb.)<br>Bossler  | Kadam        | Rubiaceae     | Tree  | Jul-Nov                | T                |
| <i>Nerium oleander</i> L.                                 | Raktakarobi  | Apocynaceae   | Shrub | Jan-Jul                | Fl               |
| <i>Nyctanthes arbor-</i><br><i>tristis</i> L.             | Seuli        | Verbenaceae   | Tree  | Aug-Jan                | O                |
| <i>Nymphaea amazonum</i><br>Mart. & Zucc.                 | Halud Hapla  | Nymphaeaceae  | Herb  | Apr-Aug                | V                |
| <i>Nymphaea nouchali</i><br>Burm.f.                       | Nil hapla    | Nymphaeaceae  | Herb  | Jun-Oct                | V                |
| <i>Nymphaea rubra</i><br>Roxb.ex Andrews                  | Lal hapla    | Nymphaeaceae  | Herb  | Aug-Jan                | V                |
| <i>Nymphoides</i><br><i>hydrophylla</i> (Lour.)<br>Kuntze | Kachuti      | Menyanthaceae | Herb  | Oct-Feb                | F                |
| <i>Nymphoides indica</i><br>(L.) Kuntze                   | Kachuti      | Menyanthaceae | Herb  | Oct-Feb                | F                |
| <i>Ocimum americanum</i> L.                               | Banno tulsi  | Lamiaceae     | Herb  | Jun-Feb                | M                |
| <i>Ocimum basilicum</i> L.                                | Tulsi        | Lamiaceae     | Herb  | Oct-Mar                | M                |
| <i>Ocimum tenuiflorum</i> L.                              | Tulsi        | Lamiaceae     | Herb  | Jan-Dec                | M                |
| <i>Oenanthe javanica</i><br>(Blume) DC.                   | Pan tulsi    | Apiaceae      | Herb  | Jun-Sep                | F                |
| <i>Oldenlandia</i><br><i>corymbosa</i> L.                 | Dima shak    | Rubiaceae     | Herb  | Jan-Dec                | V                |
| <i>Opuntia elatior</i> P.<br>Mill.                        | Fonimonsha   | Cactaceae     | Shrub | Dec-Mar                | O                |
| <i>Oroxylum indicum</i><br>(L.) Kurz                      | Thona        | Bignoniaceae  | Tree  | Jun-Mar                | M, Fu            |
| <i>Oxalis corniculata</i> L.                              | Amrul        | Oxalidaceae   | Herb  | Sep-May                | F                |
| <i>Pedilanthus</i><br><i>tithymaloides</i> (L.) Poit.     | Patabahar    | Euphorbiaceae | Herb  | Mar-Jun                | O                |
| <i>Peperomia pellucida</i><br>(L.) Kunth                  | Luchipata    | Piperaceae    | Herb  | Jul-Sep                | F                |
| <i>Persicaria hydropiper</i><br>(L.) Spach                | Lalbiskatali | Polygonaceae  | Herb  | Aug-Apr                | Fu               |
| <i>Persicaria orientalis</i><br>(L.) Spach                | Biskatali    | Polygonaceae  | Herb  | Mar-<br>Aug            | Fu               |
| <i>Petunia hybrida</i> Hort.<br>ex Vilm.                  | Petunia      | Solanaceae    | Herb  | Feb-Apr                | Fl               |
| <i>Phyla nodiflora</i> (L.)<br>Greene                     | Khai         | Verbenaceae   | Herb  | Jan-Dec                | F                |
| <i>Phyllanthus acidus</i><br>(L.) Skeels                  | Horoli       | Euphorbiaceae | Tree  | Mar-Jun                | Fr               |
| <i>Phyllanthus emblica</i> L.                             | Amloki       | Euphorbiaceae | Tree  | Mar-Sep                | M, Fr            |

Contd.

| Scientific name                                 | Local name       | Family        | Habit         | Flowering-<br>fruiting | Economic<br>uses |
|---|------------------|---------------|---------------|------------------------|------------------|
| <i>Phyllanthus niruri</i> L.                    | Vuiamla          | Euphorbiaceae | Herb          | Aug-Oct                | F                |
| <i>Phyllanthus reticulatus</i> Poir.            | Cirkuti          | Euphorbiaceae | Shrub         | Mar-Oct                | F                |
| <i>Phyllanthus sikkimensis</i> Mull.Arg.        | Sikimamla        | Euphorbiaceae | Tree          | Feb-Oct                | F, Fu            |
| <i>Physalis minima</i> L.                       | Futka bion       | Solanaceae    | Herb<br>climb | Jan-Dec                | F                |
| <i>Piper betle</i> L.                           | Pan              | Piperaceae    | er<br>climb   | Dec-May                | C, M             |
| <i>Piper peepuloides</i> Roxb.                  | Pipul            | Piperaceae    | er            | Jul-Dec                | M                |
| <i>Pisum sativum</i> L.                         | Motorsuti        | Fabaceae      | Herb          | Nov-Mar                | V                |
| <i>Pithecellobium dulce</i> (Roxb.) Benth.      | Natai            | Mimosaceae    | Tree          | Jan-Jul                | T                |
| <i>Pluchea indica</i> (L.) Less.                | Mundorokha       | Asteraceae    | Shrub         | Nov-<br>May            | F                |
| <i>Polyalthia longifolia</i> (Sonn.) Thwaites   | Debdaru          | Annonaceae    | Tree          | Mar-Oct                | T                |
| <i>Pongamia pinnata</i> (L.) Pierre             | Kenga            | Fabaceae      | Tree          | Mar-Jul                | Fu               |
| <i>Portulaca grandiflora</i> Hook.              | Noitaful         | Portulacaceae | Herb          | Mar-<br>Aug            | Fl               |
| <i>Portulaca olearacea</i> L.                   | Nunashak         | Portulacaceae | Herb          | May-Aug                | F                |
| <i>Premna esculenta</i> Roxb.                   | Tatui            | Verbenaceae   | Tree          | Apr-Sep                | Fu               |
| <i>Psidium guajava</i> L.                       | Peyara           | Myrtaceae     | Tree          | Jan-Dec                | Fr               |
| <i>Psophocarpus tetragonolobus</i> (L.) DC.     | Kamranga<br>chai | Fabaceae      | Herb          | Dec-Mar                | V                |
| <i>Punica granatum</i> L.                       | Dalim            | Punicaceae    | Tree          | Jan-Dec                | Fr               |
| <i>Raphanus sativus</i> L.                      | Mula             | Brassicaceae  | Herb          | Jan-May                | V                |
| <i>Rauvolfia serpentina</i> (L.) Benth. ex Kurz | Sarpogonda       | Apocynaceae   | Shrub         | Apr-Oct                | M                |
| <i>Ricinus communis</i> L.                      | Veron            | Euphorbiaceae | Shrub         | Jan-Dec                | M                |
| <i>Rorippa indica</i> (L.) Hiern                | Banna horra      | Brassicaceae  | Herb          | Apr-Jan                | F                |
| <i>Rosa centifolia</i> L.                       | Golap            | Rosaceae      | Shrub         | May-Jul                | Fl               |
| <i>Ruellia tuberosa</i> L.                      | Alughanti        | Acanthaceae   | Herb          | Jan-Dec                | F                |
| <i>Rumex maritimus</i> L.                       | Datipalong       | Polygonaceae  | Herb          | Jan-May                | F                |
| <i>Rumex vesicarius</i> L.                      | Chuai            | Polygonaceae  | Herb          | Dec-Mar                | V                |
| <i>Rungia pectinata</i> (L.) Nees               | Pindi            | Acanthaceae   | Herb          | Nov-<br>May            | F                |
| <i>Salvia splendens</i>                         | Salvia           | Lamiaceae     | Herb          | Jan-Dec                | O                |

Contd.

| Scientific name                             | Local name  | Family           | Habit   | Flowering-<br>fruiting | Economic<br>uses |
|---|-------------|------------------|---------|------------------------|------------------|
| Sellow <i>ex</i> Roemer & Schult.           |             |                  |         |                        |                  |
| <i>Santalum album</i> L.                    | Chandan     | Santalaceae      | Tree    | Not rec                | T                |
| <i>Scoparia dulcis</i> L.                   | Bondhone    | Scrophulariaceae | Herb    | Jan-Dec                | M                |
| <i>Senna alata</i> (L.)<br>Roxb.            | Dadmardon   | Caesalpiniaceae  | Shrub   | Sep-Jan                | M                |
| <i>Sesamum indicum</i> L.                   | Til         | Pedaliaceae      | Herb    | Feb-Oct                | Os               |
| <i>Sesbania sesban</i> (L.)<br>Merr.        | Hola        | Fabaceae         | Tree    | Apr-Jul                | F                |
| <i>Sida acuta</i> Burm.f.                   | Kureta      | Malvaceae        | Herb    | Sep-May                | F                |
| <i>Sida cordata</i><br>(Burm.f.) Waalkes    | Pitberal    | Malvaceae        | Herb    | Jan-Dec                | F                |
| <i>Sida rhombifolia</i> L.                  | Kureta      | Malvaceae        | Shrub   | Jul-Dec                | F                |
| <i>Solanum lycopersicum</i> L.              | Tomato      | Solanaceae       | Herb    | Dec-Feb                | V                |
| <i>Solanum melongena</i> L.                 | Begun       | Solanaceae       | Herb    | Oct-Mar                | V                |
| <i>Solanum myriacanthum</i> Dunal           | Tikbion     | Solanaceae       | Shrub   | Jan-Dec                | V                |
| <i>Solanum nigrum</i> L.                    | Putibegun   | Solanaceae       | Herb    | Jan-Dec                | F                |
| <i>Solanum sisymbirifolium</i> Lam.         | Kantabegun  | Solanaceae       | Shrub   | Jan-Dec                | H                |
| <i>Solanum torvum</i> Sw.                   | Titbion     | Solanaceae       | Shrub   | Jan-Dec                | V                |
| <i>Solanum tuberosum</i> L.                 | Goal Alu    | Solanaceae       | Herb    | Jan-Mar                | V                |
| <i>Solanum violaceum</i><br>Ortega          | Titbion     | Solanaceae       | Shrub   | Jan-Dec                | V                |
| <i>Solanum virginianum</i> L.               | Bannabion   | Solanaceae       | Herb    | Jun-Aug                | V                |
| <i>Sonneratia apetala</i><br>Buch.-Ham.     | Kerpa       | Sonneratiaceae   | Tree    | Apr-Dec                | Fu               |
| <i>Spermacoce latifolia</i><br>Aubl.        | Ghuijil     | Rubiaceae        | Herb    | Dec-Apr                | F                |
| <i>Sphenoclea zeylanica</i><br>Gaertn.      | Morichalata | Sphenocleaceae   | Herb    | Apr-Nov                | F                |
| <i>Spilanthes acmella</i><br>(L.) L.        | Mariccha    | Asteraceae       | Herb    | Jan-Dec                | M                |
| <i>Spinacia oleracea</i> L.                 | Palongshak  | Chenopodiaceae   | Herb    | Jan-Dec                | V                |
| <i>Spondias pinnata</i><br>(L.f.) Kurz      | Amra        | Anacardiaceae    | Tree    | Feb-Aug                | Fr               |
| <i>Stephania japonica</i><br>(Thunb.) Miers | Musarralata | Menispermaceae   | climber | Jan-Dec                | M                |
| <i>Sterculia foetida</i> L.                 | Keron       | Sterculiaceae    | Tree    | Feb-Aug                | Fr, T            |

Contd.

| Scientific name  | Local name  | Family          | Habit   | Flowering-<br>fruiting | Economic<br>uses |
|--|-------------|-----------------|---------|------------------------|------------------|
| <i>Streblus asper</i> Lour.  | Horma       | Moraceae        | Tree    | Feb-Jun                | Fu               |
| <i>Swietenia mahagoni</i><br>(L.) Jacq.                                    | Mehagoni    | Meliaceae       | Tree    | Apr-Nov                | T                |
| <i>Synedrella nodiflora</i><br>(L.) Gaertn.                                | Relanodi    | Asteraceae      | Herb    | Jan-Dec                | F                |
| <i>Syzygium cumini</i> (L.)<br>Skeels                                      | Butigajam   | Myrtaceae       | Tree    | Mar-Jun                | Fr               |
| <i>Syzygium fruticosum</i><br>(Roxb.) DC.                                  | Kawyagajam  | Myrtaceae       | Tree    | Mar-Jul                | Fr               |
| <i>Syzygium jambos</i> (L.)<br>Alston                                      | Golapjam    | Myrtaceae       | Tree    | Mar-Jun                | Fr               |
| <i>Syzygium samarangense</i><br>(Blume) Merr. &<br>L.M.Perry               | Jamrul      | Myrtaceae       | Tree    | Mar-Jul                | Fr               |
| <i>Tabernaemontana divericata</i> (L.) R.Br.<br><i>ex</i> Roemer & Schult. | Tagar       | Apocynaceae     | Shrub   | May-Jan                | Fl               |
| <i>Tagetes erecta</i> L.   | Haludghenda | Asteraceae      | Herb    | Jan-Mar                | Fl               |
| <i>Tagetes patula</i> L.   | Lalghenda   | Asteraceae      | Herb    | Nov-Mar                | Fl               |
| <i>Tamarindus indica</i> L.  | Tetul       | Caesalpiniaceae | Tree    | Apr-Dec                | Fr, T            |
| <i>Tamarix indica</i> Willd.   | Nona jau    | Tamaricaceae    | Tree    | Jan-Dec                | Fu               |
| <i>Tectona grandis</i> L.f.  | Segun       | Verbenaceae     | Tree    | Jul-Nov                | T                |
| <i>Terminalia arjuna</i><br>(Roxb. <i>ex</i> DC.) Wight<br>& Arn.          | Arjun       | Combretaceae    | Tree    | Apr-Oct                | T,M              |
| <i>Terminalia bellirica</i><br>(Gaertn.) Roxb.                             | Bahera      | Combretaceae    | Tree    | Mar-<br>Nov            | T,M              |
| <i>Terminalia catappa</i> L.   | Katbadam    | Combretaceae    | Tree    | Mar-Dec                | T                |
| <i>Thespesia populnea</i> (L.) Soland.<br><i>ex</i> Correa                 | Balai       | Malvaceae       | Tree    | Aug-Jan                | Fu               |
| <i>Thevetia peruviana</i><br>(Pers.) K.Schum.                              | Gatika      | Apocynaceae     | Tree    | Jan-Dec                | O                |
| <i>Tinospora cordifolia</i><br>(Willd.) Miers                              | Gulanch     | Menispermaceae  | climber | Jan-Oct                | M                |
| <i>Trichosanthes anguina</i> L.  | Cicinda     | Cucurbitaceae   | climber | Apr-Aug                | V                |
| <i>Trichosanthes dioica</i><br>Roxb.                                       | Patal       | Cucurbitaceae   | climber | Apr-Sep                | V                |
| <i>Urena lobata</i> L.   | Jangligagra | Malvaceae       | Shrub   | Aug-Oct                | F                |
| <i>Vigna mungo</i> (L.)<br>Hepper  | Maskolai    | Fabaceae        | Herb    | Nov-Jan                | V                |

Contd.

| Scientific name   | Local name  | Family        | Habit | Flowering-<br>fruiting | Economic<br>uses |
|---|-------------|---------------|-------|------------------------|------------------|
| <i>Vigna radiata</i> (L.)<br>R. Wilczek                             | Mug         | Fabaceae      | Herb  | Feb-Apr                | V                |
| <i>Vigna unguiculata</i><br>(L.) Walp.                              | Barboti     | Fabaceae      | Herb  | Jan-Dec                | V                |
| <i>Vitex negundo</i> L.   | Nishinda    | Verbenaceae   | Shrub | Apr-Feb                | M                |
| <i>Vitex trifolia</i> L.  | Nilnishinda | Verbenaceae   | Shrub | Feb-Mar                | M                |
| <i>Wedelia chinensis</i><br>(Osbeck) Merr.                          | Vimraj      | Asteraceae    | Herb  | Feb-Aug                | M, F             |
| <i>Xanthium indicum</i><br>J. Konig. ex Roxb.                       | Gagra       | Asteraceae    | Herb  | Jan-Dec                | F                |
| <i>Ziziphus mauritiana</i><br>Lam.                                  | Barai       | Rhamnaceae    | Tree  | Sep-Mar                | Fr, Fu           |
| <b>Liliopsida (Monocots)</b>  |             |               |       |                        |                  |
| <i>Acampe praemorsa</i><br>(Roxb.) Blatt. &<br>McCann               | Rasna       | Orchidaceae   | Herb  | Aug-Sep                | M                |
| <i>Aerides odorata</i> Lour.  | Rasna       | Orchidaceae   | Herb  | May-Jun                | M                |
| <i>Allium cepa</i> L.   | Piaj        | Liliaceae     | Herb  | Feb-Jun                | S                |
| <i>Allium sativum</i> L.  | Rashun      | Liliaceae     | Herb  | Feb-Apr                | S                |
| <i>Alocasia</i><br><i>macrorrhizos</i> (L.) G.<br>Don               | Mankachu    | Araceae       | Herb  | Jul-Oct                | V                |
| <i>Alocasia odora</i><br>(Lindl.) K. Koch                           | Hatal kachu | Araceae       | Herb  | Jan-Dec                | V                |
| <i>Aloe vera</i> (L.) Burm.f.                                       | Gritakumari | Liliaceae     | Herb  | Sep-Dec                | M                |
| <i>Alpinia nigra</i><br>(Gaertn.) B.L. Burtt                        | Tara        | Zingiberaceae | Shrub | May-Dec                | V, M             |
| <i>Amorphophallus</i><br><i>paeoniifolius</i><br>(Dennst.) Nicolson | Olkachu     | Araceae       | Herb  | May-Nov                | V                |
| <i>Amorphophalus</i><br><i>bulbifer</i> (Roxb.)<br>Blume            | Jangleol    | Araceae       | Herb  | May-Oct                | V                |
| <i>Ananus comosus</i> (L.)<br>Merr.                                 | Anaros      | Bromeliaceae  | Herb  | Feb-Jul                | Fr               |
| <i>Areca catechu</i> L.   | Supari      | Arecaceae     | Tree  | Jan-Dec                | Fr               |
| <i>Bambusa balcooa</i><br>Roxb.                                     | Bora bans   | Poaceae       | Tree  | Mar-Sep                | F, Fu            |
| <i>Bambusa jaintiana</i><br>R.B. Mazumdar                           | Chikon bans | Poaceae       | Tree  | Mar-Feb                | F, Fu            |
| <i>Bambusa vulgaris</i><br>Schrud.                                  | Bangla bans | Poaceae       | Tree  | Apr-<br>May            | F, Fu            |
| <i>Borassus flabellifer</i> L.                                      | Tal         | Arecaceae     | Tree  | Jan-Oct                | Fr               |

Contd.

| Scientific name   | Local name                        | Family         | Habit               | Flowering-<br>fruiting | Economic<br>uses |
|---|-----------------------------------|----------------|---------------------|------------------------|------------------|
| <i>Bothriochola pertusa</i><br>(L.) A. Camus            | Goradubla                         | Poaceae        | Herb                | Aug-Feb                | F                |
| <i>Calamus latifolius</i><br>Roxb.                      | Kerat Bet                         | Arecaceae      | Shrub               | Nov-Jun                | Fr, Fn           |
| <i>Calamus viminalis</i><br>Willd.                      | Bet                               | Arecaceae      | Shrub               | Jan-Dec                | Fr, Fn           |
| <i>Canna indica</i> L.                                  | Kalabati                          | Cannaceae      | Herb                | Apr-Nov                | O                |
| <i>Cheilocostus speciosus</i><br>(J.Konig)<br>C. Specht | Kew shak                          | Costaceae      | Herb                | Sep-Dec                | V                |
| <i>Chrysopogon aciculatus</i><br>(Retz.)<br>Trin.       | Bait                              | Poaceae        | Herb                | Jan-Dec                | F                |
| <i>Cocos nucifera</i> L.                                | Narkel                            | Arecaceae      | Tree                | Mar-Jul                | Fr               |
| <i>Coix lacryma-jobi</i> L.                             | Sada Hongais                      | Poaceae        | Herb                | Aug-Mar                | M                |
| <i>Colocasia esculenta</i><br>(L.) Schott.              | Kachu                             | Araceae        | Herb                | May-Oct                | V                |
| <i>Commelina benghalensis</i> L.                        | Kanaialata                        | Commelinaceae  | Herb                | Feb-Dec                | M, F             |
| <i>Commelina paludosa</i><br>Blume                      | Kanaialata<br>Goron, Golras<br>un | Commelinaceae  | Herb                | Oct-Mar<br>Mar-<br>Aug | M, F<br>M        |
| <i>Crinum asiaticum</i> L.                              |                                   | Liliaceae      | Herb                |                        |                  |
| <i>Curcuma aeruginosa</i><br>Roxb.                      | Banna halud                       | Zingiberaceae  | Herb                | May                    | S                |
| <i>Curcuma longa</i> L.                                 | Halud                             | Zingiberaceae  | Herb                | Aug-Oct                | S                |
| <i>Cymbopogon citratus</i><br>(DC.) Stapf               | Aghnighas                         | Poaceae        | Herb                | Jul-Sep                | F                |
| <i>Cynodon dactylon</i><br>(L.) Pers.                   | Dublakher                         | Poaceae        | Herb                | Jul-Dec                | F                |
| <i>Cyperus cuspidatus</i><br>Kunth                      | Sagarmukhi<br>methi               | Cyperaceae     | Herb                | Aug-<br>Nov            | F                |
| <i>Cyperus imbricatus</i><br>Retz.                      | Burethi<br>Pasham                 | Cyperaceae     | Herb                | Jun-Nov                | F                |
| <i>Cyperus pilosus</i> Vahl                             | kathai                            | Cyperaceae     | Herb                | Jan-Dec                | F                |
| <i>Cyperus rotandus</i> L.                              | Kaiabeda                          | Cyperaceae     | Herb<br>climb<br>er | May-Sep                | F                |
| <i>Dioscorea alata</i> L.                               | Bangalu                           | Dioscoreaceae  |                     | Oct-Dec                | V                |
| <i>Eichhornia crassipes</i><br>(Mart.) Solms            | Kachuripana                       | Pontederiaceae | Herb<br>climb<br>er | Jan-Dec                | F                |
| <i>Epipremnum aureum</i><br>(Linden & Andre)            | Money plant                       | Araceae        |                     | Not rec                | O                |



Contd.

| Scientific name   | Local name      | Family         | Habit | Flowering-<br>fruiting | Economic<br>uses |
|---|-----------------|----------------|-------|------------------------|------------------|
| G.S.Bunting   |                 |                |       |                        |                  |
| <i>Homalomena aromatica</i> (Spreng.) Schott                    | Kachu           | Araceae        | Herb  | Jun-Sep                | V                |
| <i>Imperata cylindrica</i> (L.) Raeusch. var. <i>cylindrica</i> | Chon            | Poaceae        | Herb  | Oct-Jan                | F                |
| <i>Lasia spinosa</i> (L.) Thwaites                              | Bonhadda        | Araceae        | Herb  | Jan-Nov                | V                |
| <i>Lemna perpusilla</i> Torr.                                   | Guri fena       | Lemnaceae      | Herb  | Not rec                | F                |
| <i>Monochoria hastata</i> (L.) Solms.                           | Fena            | Pontederiaceae | Herb  | Jan-Dec                | F                |
| <i>Musa acuminata</i> Colla                                     | Kola            | Musaceae       | Herb  | Jun-Sep                | Fr               |
| <i>Musa paradisiaca</i> L.                                      | Anajikola       | Musaceae       | Herb  | Jan-Dec                | Fr               |
| <i>Oryza sativa</i> L.  | Dhan            | Poaceae        | Herb  | Sep-Jun                | Co               |
| <i>Pandanus amaryllifolius</i> Roxb.                            | Polao pata      | Pandanaceae    | Shrub | Not rec                | V                |
| <i>Panicum miliaceum</i> L.                                     | Kaindan         | Poaceae        | Herb  | Mar-Sep                | Co               |
| <i>Phoenix sylvestris</i> (L.) Blume                            | Khejur          | Arecaceae      | Tree  | Dec-Jul                | Fr               |
| <i>Pistia stratiotes</i> L.                                     | Futihena        | Araceae        | Herb  | Oct-Mar                | F                |
| <i>Polianthes tuberosa</i> L.                                   | Rajanigonda     | Aloeaceae      | Herb  | Jul-Sep                | Fl               |
| <i>Porteresia coarctata</i> (Roxb.) Takeoka                     | Uridan          | Poaceae        | Herb  | Sep-Mar                | F                |
| <i>Rhynchosyilis retusa</i> (L.) Blume.                         | Rasna           | Orchidaceae    | Herb  | May-Jul                | M                |
| <i>Saccharum officinarum</i> L.                                 | Kuyar           | Poaceae        | Herb  | Aug-Oct                | C                |
| <i>Saccharum spontaneum</i> L.                                  | Kasful, Kaiccha | Poaceae        | Herb  | Jan-Dec                | F                |
| <i>Schumannianthus dichotomus</i> (Roxb.) Gagnep.               | Sitol pati      | Marantaceae    | Shrub | Dec-Mar                | H                |
| <i>Spirodela polyrhiza</i>                                      | Fena            | Lemnaceae      | Herb  | Not rec                | F                |

| Scientific name<br>(L.) Schleid.     | Local name | Family        | Habit | Flowering-<br>fruiting | Economic<br>uses |
|--------------------------------------|------------|---------------|-------|------------------------|------------------|
| <i>Typha elephantina</i><br>Roxb.    | Daripata   | Typhaceae     | Herb  | Mar-<br>May            | Th               |
| <i>Zea mays</i> L.                   | Bhutta     | Poaceae       | Herb  | Apr-Aug                | Co               |
| <i>Zingiber officinale</i><br>Roscoe | Ada        | Zingiberaceae | Herb  | Sep-Nov                | S                |
| <i>Zoysia matrella</i> (L.)<br>Merr. | Latakher   | Poaceae       | Herb  | Mar-Sep                | F                |

Legend: Jan-January, Feb- February, Mar-March, Apr-April, Jun-June, Jul-July, Aug-August, Sep-September, Oct-October, Nov-November, Dec-December, Not rec=-Not recorded, V-vegetables, M-Medicinal, T-Timber, Fr-Fruit, F-Fodder, O-Ornamental, Os-Oil seed, Fl-Flowering, Fu-Fuel, S-Spices, F-Fibre yielding, H-Hedge, C-Chewing, Fn-Furniture, Co-Corn, Th-Thatching.

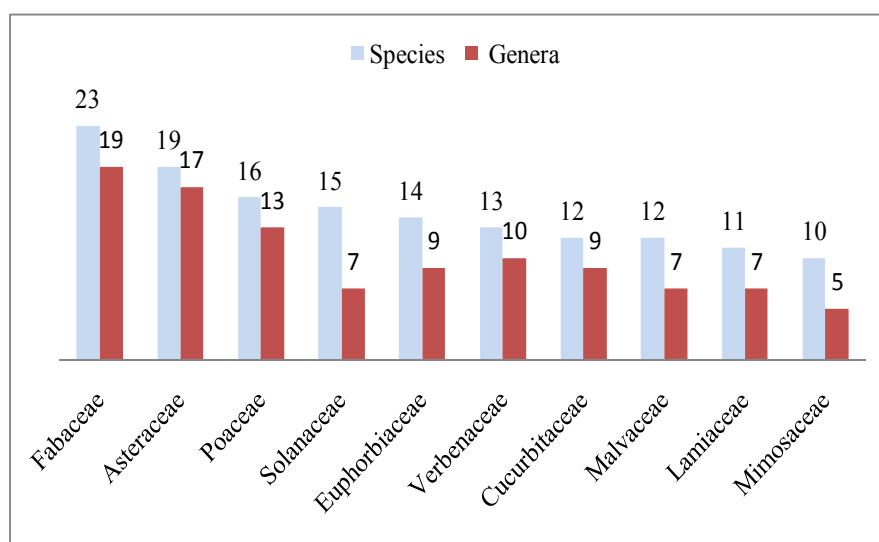


Fig. 2. Ten dominant angiosperm plant families of Subarnachar.

In Magnoliopsida, Fabaceae appears to be the largest family having with 23 species and 19 genera whereas, in Liliopsida, Poaceae appears to be the largest family having with 16 species and 13 genera. But, Poaceae is the largest and Fabaceae is the second largest family in the National Flora. Five angiosperm families (Poaceae, Fabaceae, Asteraceae, Euphorbiaceae, Lamiaceae) of the area showed similarly largest among the ten dominant families as of Bangladesh Flora also. Ten dominant families (11.49% of total) are holding about 40.08% of the total genera and 42.03% of the total species in Subarnachar. 33 plant families represented by single genus and single species.

It is evident that *Solanum* is the largest genus containing 9 species followed by *Ficus* (5 sp.), *Phyllanthus* (5 sp.), *Cyperus* (4 sp.), *Citrus* (4sp.), *Ipomoea* (4 sp.), *Syzygium* (4 sp.), *Albizia* (3 sp.), *Chenopodium* (3 sp.) and *Sida* (3 sp.) (Table 2). But in Bangladesh Flora, it is *Ficus* (61 sp.), *Cyperus* (51 sp.), *Dendrobium* (43 sp.), *Syzygium* (36 sp.), *Fimbristylis* (34 sp.), *Ipomoea* (34 sp.), *Crotalaria* (28 sp.), *Euphorbia* (25 sp.), *Dalbergia* (24 sp.) and *Strobilanthes* (24 sp.) respectively (Pasha and Uddin 2013).

Table 2. List of ten dominant Genera of Subarnachar and National Flora.

| Subarnachar        |                | National Flora       |                |
|--------------------|----------------|----------------------|----------------|
| Genera             | No. of species | Genera               | No. of species |
| <i>Solanum</i>     | 9              | <i>Ficus</i>         | 61             |
| <i>Ficus</i>       | 5              | <i>Cyperus</i>       | 51             |
| <i>Phyllanthus</i> | 5              | <i>Dendrobium</i>    | 43             |
| <i>Cyperus</i>     | 4              | <i>Syzygium</i>      | 36             |
| <i>Citrus</i>      | 4              | <i>Fimbristylis</i>  | 34             |
| <i>Ipomoea</i>     | 4              | <i>Ipomoea</i>       | 34             |
| <i>Syzygium</i>    | 4              | <i>Crotalaria</i>    | 28             |
| <i>Albizia</i>     | 3              | <i>Euphorbia</i>     | 25             |
| <i>Chenopodium</i> | 3              | <i>Dalbergia</i>     | 24             |
| <i>Sida</i>        | 3              | <i>Strobilanthes</i> | 24             |

Among the angiosperms, herbs represented by 174 species, shrubs by 53, trees by 96 and climbers by 22 species respectively. The habit diversity shows that herbaceous plants are dominating over trees, shrubs and climbers (Fig. 3).

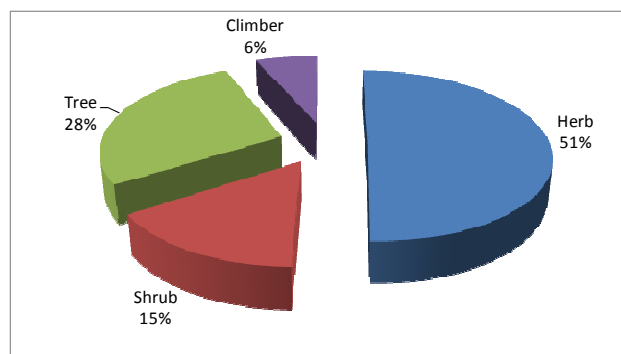


Fig. 3. Habit diversity of angiosperm plants of Subarnachar.

The plant diversity of the island is represented by 94% terrestrial, 5% aquatic and 1% epiphytic species. Major aquatic vegetation of the area represented by *Centrostachys aquatica*, *Eichhornia speciosa*, *Hygrophila auriculata*, *Lemna perpusilla*, *Monochoria*

*hastata*, *Pistia stratiotes*, *Sphenoclea zeylanica* and *Spirodela polyrhiza* respectively. *Acampe papillosa* and *Rhynchostylis retusa* are the common epiphytic orchid plant of the island. *Porteresia coarctata*, *Heliotropium curassaviacum* and *Zoysia matrella* are commonly grow in the char land. The angiospermic plants which found naturally or growing wild are represented by 48% species and the cultivated or planted are 52%. The diversity of cultivated species is higher than the wild one. Phenology or flowering and fruiting period varied from species to species. Spring represents highest (28%) and summer represents lowest (12%) number of flowering-fruiting occurred in angiosperms (Fig. 4).

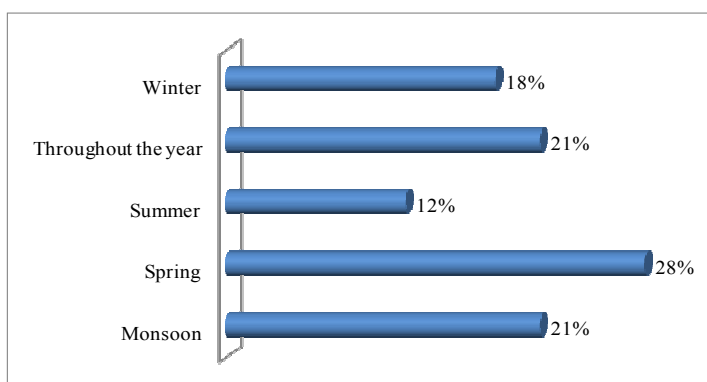


Fig. 4. Phenology of angiosperm species in the study area.

The homestead cultivated plants are the dominant floristic composition of the area. The trees which are most common and occupied the major canopy of the area are *Albizia odoratissima*, *Albizia saman*, *Artocarpus heterophyllus*, *Cocos nucifera*, *Litsea monopetala*, *Mangifera indica*, *Phoenix sylvestris*, *Pongamia pinnata*, *Syzygium cumini*, *Thespesia populnea* and *Terminalia catappa*. On the basis of abundancy, the main characteristics plants of the area are *Pithecellobium dulce*, *Derris trifoliata*, *Stephania japonica*, *Ipomoea fistulosa* and *Acacia nilotica*. Dominant herbaceous plants of the area are *Cynodon dactylon*, *Oenanthе javanica*, *Phyla nodiflora* and *Scoparia dulcis* respectively. Most commonly cultivated crops are *Arachis hypogaea*, *Citrullus lanatus*, *Solanum tuberosum*, *Solanum melongena*, *Solanum lycopersicum*, *Oryza sativa*, *Piper betle*, *Cucurbita maxima*, *Ipomoea batatas* and *Lathyrus sativus*.

The plant diversity of southern parts of Subarnachar is dominated by mangrove plants like *Acanthus illicifolius*, *Excoecaria agallocha*, *Sonneratia apetala*, *Derris scandens* and *Tamarix indica*. Mangrove plantation started during 1967-68 in newly developed land of southern parts- Charbata and Char Alauddin (Mahmud 2007). Major part of the mangrove is destroying by anthropological activities, only few parts are appeared at the present time. Social forestry programme was done by Noakhali forest department from 1981-82 through which *Phyllanthus emblica*, *Dalbergia sissoo*, *Casuarina equisetifolia*, *Acacia auriculiformis*, *Azadirachta indica* and *Acacia mangium* etc. were planted

(Mahmud 2007). The area is heavily populated and by diverse activities they control the vegetation in general. The characteristics vegetation is evergreen in nature. Few plants like *Terminalia* spp, *Albizia* spp, *Zizyphus mauritiana*, *Erythrina fusca*, *Bombax ceiba*, *Cassia fistula* and *Crateva magna* which are deciduous, sometimes alter the evergreen nature of the area.

People depend much for their livelihood on the cultivated plants around the homestead area for the high population density in the area. They always clear the lands for the cash crops cultivation. These activities enhanced the degradation of plant diversity in the area. Grazing by domestic animals also alter the vegetation. Destruction of homestead vegetation, agricultural extension, introduction of exotic species and drought are the main threats to the flora of the area. It is very essential to document the angiosperm plant species before their disappearing and to recommend a suitable conservation strategy to conserve the phytodiversity of the area.

### Acknowledgement

The authors are grateful to Prof. Dr. Mostafa Kamal Pasha, Department of Botany, University of Chittagong for his valuable suggestions and criticisms during preparing this manuscript and to identify some critical specimens.

### References

- Ahmed, Z.U., Z.N.T. Begum, M.A. Hassan, M.M. Khondker, S.M.H. Kabir, M. Ahmad, A.T.A. Ahmed, A. K.A. Rahman, and E.U. Haque (eds.). 2008 -2009. *Encyclopedia of Flora and Fauna of Bangladesh*. 6-10. Angiosperms; Dicotyledons. Asiatic Society of Bangladesh, Dhaka.
- Alam, M.S., M.A. Hassan and M.Z. Uddin. 2006. A Preliminary Checklist of the Angiospermic Flora of Ghagotia Union under Kapasia Upazila in Gazipur District, Bangladesh. *Bangladesh J. Plant Taxon.* **13** (2): 155-170.
- Arefin, M.K., M.M. Rahman, M.Z. Uddin and M.A. Hassan. 2011. Angiosperm flora of Satchari National park, Habiganj, Bangladesh. *Bangladesh J. plant Taxon.* **18** (2): 117-140.
- Catalogue of Life. 2012. Website: [www.catalogueoflife.org](http://www.catalogueoflife.org).
- Hooker, J.D. 1872-1897. *The Flora of British India*. 1-7. (Ind. Repr. 1973), Bishen Singh Mahendra Pal Singh, Dehra Dun, India.
- Huq, A.M. 1988. A Preliminary taxonomic report on the Angiospermic flora of Hatia Island (Noakhali district) (Dicotyledons). M.S. Khan (eds.). *Bull. Bangladesh Natl. Herbarium*. No.1, Dhaka.
- Islam, M.R., M.Z. Uddin and M.A. Hassan. 2009. An assessment of the Angiospermic flora of Ramgarh upazila of Khagrachhari district, Bangladesh. *Bangladesh J. Plant Taxon.* **16** (2): 115-140.
- Khan, M.S., A.M. Huq and M.M. Rahman. 1985. Studies on the Angiospermic flora of Nijhum Dwip (Char Osman) in the Bay of Bengal. *Dhaka Univ. Stud.* **33** (B): 145-151.
- Mahmud, A.K.M.G. 2007. *Shamvabonamoye Subornachar*. M A Salam Publishers, Banglabazar, Dhaka. 96pp.

- Pasha, M. K. and S. B. Uddin. 2013. *Dictionary of plant names of Bangladesh (Vascular plants)*. Janokalyan Prokashani, Andarkilla, Chittagong, Bangladesh. 434pp.
- The Plant List. 2010. Website: [www.theplantlist.org](http://www.theplantlist.org).
- Prain, D. 1903. *Bengal Plants*. Vol. **1** and **2**. Reprint Edition 1963. Calcutta.
- Rahman, M.O., R.T. Antara, M. Begum and M.A. Hassan. 2012. Floristic diversity of Dhamrai upazila of Dhaka with emphasis on medicinal plants. *Bangladesh J. Bot.* **41**(1): 71-85.
- Siddiqui, K.U., M.A. Islam, Z.U. Ahmed, Z.N.T. Begum, M.A. Hassan, M.A.M. Khondker, M.M. Rahman, S.M.H. Kabir, M. Ahmad, A.T.A. Ahmed, A .K.A. Rahman and E.U. Haque (eds.). 2007. *Encyclopedia of Flora and Fauna of Bangladesh*. **11**. Angiosperms; Monocotyledons. Asiatic Society of Bangladesh, Dhaka.
- Uddin, M.Z. and M.A. Hassan. 2010. Angiosperm diversity of Lawachara National Park (Bangladesh): A preliminary assessment. *Bangladesh J. Plant Taxon.* **17** (1): 9-22.

*(Received revised manuscript on 19 September 2013)*