PRELIMINARY TAXONOMIC STUDY ON HOMESTEAD FLORA OF FOUR DISTRICTS OF BANGLADESH: MAGNOLIOPSIDA

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Abstract

This study has documented the contemporary taxonomic information on the species of the class Magnoliopsida (Dicotyledons) extant in the homestead areas of Dhaka, Gazipur, Manikganj and Tangail districts of Bangladesh. In these areas, the Dicotyledons are comprised of total 455 species under 302 genera belonging to 78 families. Fabaceae with 41 species is the largest family and Solanum and Lindernia are the largest genera. Total 238 species are herbs followed by 129 species of trees and 88 species of shrubs. Total 332 species are economically useful. The composition and distribution of the species of this plant group are remarkably variable in the homestead areas of the four districts. The current status of seven threatened species viz., Abroma augusta, Andrographis paniculata, Anisnea martinicensis, Mucuna bracteata, Pterocarpus santalinus, Rauvolfia serpentina and Tournefortia roxburghii, included in the Red Data Book of Bangladesh and extant in the study area, has been evaluated and described. This study has identified some threats to the homestead flora and formulated some recommendations for the conservation of threatened and declining native plant species of the study area. The data provided by this study will serve as an important baseline to track the trend of changes in the floristic composition and diversity and sustainable development of plant genetic resources in the homesteads of the study area.

Introduction

Dicotyledons are the most successful and dominant plant group (Heywood, 1993). They comprise about 62.5% of the total angiosperm species (ca. 400000) recorded from this planet so far (Leitch and Leitch, 2008). Dicots are the major biotic component of almost all ecosystems and essential for human being as the source of food, cloths, shelter, medicines, fodder and many other substances used in different purposes worldwide. Bangladesh is endowed with about 5,000 species of flowering plants, of which more than two third are Dicotyledonous (Khan, 1972-1987). Dicot plants dominate the forests, village groves and woodlands of Bangladesh (Khan and Afza, 1968; Khan and Banu, 1969; Khan, 1972-1987).

Homesteads are privately owned dwellings in the rural and semi-urban settings that typically consist of a living area, kitchen, backyard, front yard, and sometimes a pond and patio (Muhammed et al., 2011). A homestead forest, or “homegarden”, is usually a complex mixture of deliberately planted vegetation and designed to produce natural products for the household uses or market sale. It is an operational unit, in which a number of crops are grown with livestock, poultry and fish production mainly for the purpose of the farmer’s basic needs (Leuschner and Khaleque, 1987). Bangladesh has 15.4 million homesteads occupying 0.3 million hectares of land that are providing major requirement of food, fruit, vegetables, timber and fuel wood (Abedin and Quddus, 1990). Plants of the homesteads are receiving increasing attention from scientists, practitioners and policymakers because of their social, economic, ecological and environmental benefits (Alam, 2011).

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In Bangladesh, there is no specific management plan for the homestead forests (FAO, 2010) and the household owners are traditionally managing these. It is estimated that about 70% of timber, 90% of firewood, 48% of sawn and veneer logs, and almost 90% of bamboo requirements are met from homestead forests (Uddin et al., 2002). During the last 40–50 years, the relative importance has shifted from the traditional forestry to homestead plantation (Roy et al., 2013).

Previously some detail floristic studies (Hooker, 1872–1897; Prain, 1903; Khan, 1972–1987; Ahmed et al., 2008–2009) were carried on covering the political boundary of Bangladesh. Many taxonomic inventories (Khan et al., 1977; Khan et al., 1985; Huq, 1986, 1988; Alam et al., 2006; Rahman et al., 2012; Rahman, 2013; Rahman et al., 2013; Rahaman et al., 2015; Shetu et al., 2018; Tabassum, 2015) were also performed in different urban and rural areas of this country. However, these studies do not provide specific data on the homestead forests or floras of the study area.

A good of number studies (Bashar, 1999; Uddin et al., 2002; Alam et al. 2005; Masum et al., 2008; Kabir and Webb, 2009; Miah and Hussain, 2010; Alam, 2011; Muhammed et al., 2011; Muhammed et al., 2013; Islam et al., 2013; Rahman et al., 2013; Roy et al., 2013; Islam et al., 2015; Rahaman et al., 2015; Sajib et al., 2016) were carried out on the homestead forests in different regions of Bangladesh. However, the homestead floras of Dhaka, Manikganj, Gazipur and Tangail regions are not yet studied. This study was carried out to provide basic and recent taxonomic information on the species of the class Magnoliopsida (Dicotyledons) extant in the visited homestead areas of Bangladesh.

Materials and Methods

The study area lies in Dhaka, Gazipur, Manikganj and Tangail districts, that are located in central Bangladesh, in between 23°38′–24°48′N and 89°41′–90°42′E and composed of an area of about 8067.97 sq km. This study was conducted during 2013 to 2018 based on a thorough taxonomic inventory involving 240 field trips to 1120 representative homestead areas belonging to 40 villages of 20 upazilas under the four districts in different seasons (Fig. 1).

Following a preliminary reconnaissance survey, four categories of homesteads viz., old joint, old isolated, and new joint and new isolated, were selected from each district for better representation. The selected old homesteads were more than 20 years to 80 years old and the new ones were more than five years to less than 20 years old. The homesteads of each district were equal in number, more or less homogenous and from plain land areas to protected. Representative specimens with flowers and fruits were collected during the field trips. Routine herbarium methods (Jain and Rao., 1977) have been followed in collecting, preparing, pressing, drying, mounting, and storing the plant specimens.

All plant specimens were identified through consulting with the experts, taxonomic descriptions and keys available in the relevant literature (Hooker, 1872–1897; Wu et al., 1995–2013), and matching with relevant voucher specimens preserved at Jahangirnagar University Herbarium (JUH), and Bangladesh National Herbarium (DACB). Nomenclatural information were verified through consulting TROPICOS (2010), The Plant List (2013), International Plant Names Index (2015) and the recent floras (Wu et al., 1995–2013; Watson et al., 2011). The families have been arranged following Cronquist (1981). The families Phyllanthaceae and Putranjivaceae, not included in Cronquist (1981)’s System, are placed besides their close family Euphorbiaceae. All genera and species are presented alphabetically. All voucher specimens are housed at JUH. The similarities in species composition in the homesteads of four districts have been measured following Jaccard coefficient (Jaccard, 1912). The threatened status of the species in the homesteads of the study area was recognized based on their existing population.
size, distribution range, and regeneration in the area, collections, interviews with elderly local people, and consulting the relevant IUCN guidelines (IUCN Standards and Petitions Committee, 2019).

Results and Discussion

This study recorded total 455 species of Magnoliopsida (Dicotyledons) under 302 genera and 78 families from the visited homestead areas of Dhaka, Gazipur, Manikganj and Tangail districts (Table 1). Twenty three of the families were represented by single species each, 39 families by 2-10 species and only 13 families by 11-20 species. The homesteads of four districts
Table 1. Taxonomic checklist of the species of Magnoliopsida extant in the homestead areas of Dhaka, Gazipur, Manikganj and Tangail districts.

| Scientific Name | Bangla name | District | Habit | Habitat | Occ. | Fl./Fr. Time | Use | RSE |
|-----------------|-------------|----------|-------|---------|------|--------------|-----|-----|
| **ANNONACEAE**  |             |          |       |         |      |              |     |     |
| Annona reticulata L. | Nona | D, G, M, T | T | Ah, Fp | C | Fl. May-Jul Fr. Sep-Jan | Fr | GKR2262 |
| *A. squamosa* L. | Ata | D, G, M, T | T | Ah | C | Fl. Apr-May Fr. Aug-Nov | Fr | GKR0671 |
| Miliusa velutina (A.DC.) Hook.f. & Thomson | Gandhigajari | G, M T | Ah | Fp | O | Fr. Dec-May Fr. U | Fw | GKR1679 |
| *Polyalthia longifolia* (Sonn.) Thwaites | Debbari | D, G, M, T | T | Fp, Rs | C | Fl. Mar-May Fr. Jul-Sep | T | GKR0697 |
| *P. suberosa* (Roxb.) Thwaites | Hamjam; Murmuri | D, G, S | Fp, Rs | C | Fl. Sep-Mar Fr. U | W | GKR1106 |
| *Uvaria littoralis* Blume | Gagh-ranga | G S | Fp | O | Fl. Jul-Aug Fr. U | W | GKR1133 |
| **LAURACEAE**   |             |          |       |         |      |              |     |     |
| Cinnamomum tamala (Buch.-Ham.) T. Nees & Eberm. | Tejpata | D, M T | Ah | O | Fl. Feb-Oct Fr. U | S | GKR0172 |
| *C. zeylanicum* Blume | Daruchini | M, T ST | Ah | O | Fl. Apr-Jun Fr. U | S | GKR1572 |
| *Litsea glutinosa* (Lour.) C.B.Rob. | Kukurchita | D, T T | Ah, Rs | O | Fl. Apr-May Fr. U | W | GKR2895 |
| *L. salicifolia* (J. Roxb. ex Nees) Hook. f. | Bara shiyal-buka, Digloti | D, M T | Rs | O | Fl. Apr-May Fr. U | W | GKR0145 |
| **PIPERACEAE**  |             |          |       |         |      |              |     |     |
| Peperomia pellucida (L.) Kanth | Luchipata | D, G, M, T | H | Ah, Fp, Rs | C | Fl. Sep-Dec Fr. U | We | GKR0512 |
| *Piper betle* L. | Pan | M, T H | Ah | O | Fl. Apr-May Fr. U | M | GKR1571 |
| *P. longum* L. | Pipul | D, T H | Ah, Fp | O | Fl. Aug-Jan Fr. U | M | GKR0045 |
| *P. peepuloides* Roxb. | wild pepper | M, T H | Ah, Fp, Rs | O | Fl. Nov-Dec Fr. U | W | GKR1125 |
| *P. peploides* (Kanth) Poir. | Pipul | D, M T | Ah | O | Fl. Jun-Aug Nov-Dec Fr. U | W | GKR1272 |
| *P. sylvaticum* Roxb. | Pahari pipal | D H | Rs | O | Fl. Aug-Sep Fr. U | W | GKR1544 |
| **ARISTOLOCHIACEAE** |             |          |       |         |      |              |     |     |
| Aristolochia indica L. | Ishwarmul | G, M, T H | Ah, Fp, Rs | O | Fl. Jul-Mar Fr. U | M | GKR0038 |
| **RANUNCULACEAE** |             |          |       |         |      |              |     |     |
| Ranunculus sceleratus L. | Palik, Podika | M H | Fp | O | Fl. Feb-May Fr. U | M | GKR0062 |
| **MENISPERMACEAE** |             |          |       |         |      |              |     |     |
| Cocculus hirsutus (L.) W. Theob. | Doipata, Jhaljamani | G H | Fp | O | Fl. & Fr. Throughout the year Fr. U | M | GKR0334 |
| *Stephania japonica* (Thunb.) Miers | Nimukha, Aknadi | D, M S | Ah, Fp, Rs | O | Fl. Mar-Sep Fr. U | M | GKR0095 |

(Table contd.)
| Scientific Name                  | Bangla name   | District | Habit | Habitat | Occ. | FL/Fr. Time | Use | RSE   |
|---------------------------------|---------------|----------|-------|---------|------|-------------|-----|-------|
| *Tiliacora acuminata* Miers     | Baghlata      | G, M, T  | S     | Ah, Fp, Rs | O    | Fl. Apr-Dec Fr. U | M   | GKR0122 |
| *Tinospora crispa* (L.) Hook. f. & Thomson | Gulancha | D        | S     | Rs      | O    | Fl. Feb-Jun Fr. U | M   | GKR1344 |
| *T. sinensis* (Lour.) Merr.     | China gulancha | G, T    | S     | Ah, Fp  | O    | Fl. Feb-Jun Fr. U | M   | GKR0304 |
| **ULMACEAE**                    |               |          |       |         |      |             |     |       |
| *Holoptelea integrifolia* Planch. | nata karanja | G        | T     | Ah, Fp  | O    | Fl. & Fr. Dec-Mar Fr. U | Fw | GKR0359 |
| **CANNABACEAE**                 |               |          |       |         |      |             |     |       |
| *Cannabis sativa* L.            | Gaza          | M, T     | H     | Fp, Rs  | O    | Fl. Aug-Mar Fr. U | M   | GKR0139 |
| *Trema orientalis* (L.) Blume   | Jibon         | D, G, M, T | T | Fp, Rs  | C    | Fl. Sep-Dec Fr. U | M   | GKR0570 |
| **MORACEAE**                    |               |          |       |         |      |             |     |       |
| *Artocarpus heterophyllus* Lam. | Kanthal       | D, G, M  | T     | Ah, Rs  | O    | Fl. Jan-Jun Fr. U Fr. T | GKR0174 |
| *A. lacucha* Buch.-Ham.         | Dewa          | D, G, M, T | T | Ah, Fp, Rs | C    | Fl. Feb-May Fr. U Fr. T | GKR2082 |
| *Ficus benghalensis* L.         | Bot           | D, G, M, T | T | Fp      | C    | Fl. May-Jul Fr. U Fr. T | GKR0310 |
| *F. carica* L.                  | Dumur, Anjir  | D, G, M, T | T | Ah, Fp  | C    | Fl. May-Aug Fr. U Fr. T | GKR0079 |
| *F. heterophylla* L. f.         | Bhuidumur     | D, G, M, T | S | Ah, Fp, Rs | C    | Fl. Nov-Jan Fr. U Fr. T | GKR0033 |
| *F. hispida* L. f.              | Kakdumur      | D, G, M, T | T | Ah, Fp, Rs | C    | Fl. Sep-May Fr. U Fr. T | GKR0577 |
| *F. racemosa* L.                | Jogo dumur    | D, G, M, T | T | Ah, Fp, Rs | C    | Fl. Feb-May Fr. U Fr. T Fr. Fw | M | GKR1763 |
| *F. religiosa* L.               | Ashatha       | D, G     | T     | Ah, Fp  | O    | Fl. & Fr. Nov-Feb Fr. U | M | GKR3132 |
| *F. rumphii* Blume              | Pakur         | D, M     | T     | Ah, Rs  | O    | Fl. Mar-Nov Fr. U Fr. U | M | GKR1324 |
| *Morus alba* L.                 | Tut           | M       | ST    | Rs      | O    | Fl. Apr-Aug Fr. U Fr. U | M | GKR1243 |
| *Premna bengalensis* C.B.Clarke  | Koya-jarul    | D        | T     | Fp      | O    | Fl. May-Nov Fr. U Fr. U | W | GKR1607 |
| *Streblus asper* Lour.          | Sheora        | D, G, M  | H     | Bb, Ep, Fp | O   | Fl. & Fr. Feb-Jun Fr. U Fr. Fw | M | GKR1822 |
| **URTICACEAE**                  |               |          |       |         |      |             |     |       |
| *Gonostegia hirta* (Blume ex Hassk.) Miq. | Unknown | G, M  | ST    | Ah, Fp, Rs | O    | Fl. Jun-Jul Fr. Aug-Sep Fr. U Fr. U | M, | GKR0175 |
| *Laportea interrupta* (L.) Chew | bichuti       | D, G, M, T | H | Ah, Fp, Rs | C    | Fl. Jul-Sep Fr. U Fr. U | W | GKR0861 |
| *Pilea microphylla* (L.) Liebm.  | Rockweed      | T        | H     | Ah      | O    | Fl. Aug-Nov Fr. U Fr. U We | GKR1065 |
| *Pouzolzia zeylanica* (L.) Benn. | Bilati luchipata | D, G, M, T | H | Ah, Fp, Rs | C    | Fl. Aug-Dec Fr. U Fr. U | W | GKR1072 |

(Table contd.)
| Scientific Name            | Bangla name    | District | Habit | Habitat | Occ. | FL./Fr. Time | Use | RSE     |
|---------------------------|----------------|----------|-------|---------|------|--------------|-----|---------|
| **NYCTAGINACEAE**         |                |          |       |         |      |              |     |         |
| Boerhavia diffusa L.      | Punarnova      | G, T     | H     | Ah, Fp, | Rs   | Fl. Nov-Feb  | M   | GKR2156 |
| Mirabilis jalapa L.       | Sandhyamaloti  | G, M, T  | H     | Ah, Fp, | Rs   | Fl. Jun-Oct  | Or  | GKR0046 |
| **CHENOPODIACEAE**        |                |          |       |         |      |              |     |         |
| Chenopodium album L.      | Bathuashak     | D, G, M, T| H     | Ah, Fp, | Rs   | Fl. Feb-Mar  | V   | GKR0620 |
| C. ambrosioides L.        | Chandanbeto    | D, T     | H     | Ah, Fp, | Rs   | Fl. & Fr. Throughout the year | V | GKR0553 |
| **AMARANTHACEAE**         |                |          |       |         |      |              |     |         |
| Achyranthes aspera L.     | Apang, Bilaicahra | D, G, M, T| H     | Ah, Fp, | Rs   | Fl. Jan-Aug | M   | GKR0297 |
| Alternanthera paronychiodes A.St. Hil. | Jiuli khata | D, G, M, T| H     | Ah, Fp, | Rs   | Fl. Jun-Aug | W  | GKR0051 |
| A. philoxeroides (Mart.) Griseb. | Haicha, Malancha | D, G, M, T| H     | Ah, Fp, | Rs   | Fl. Jan-Aug | V  | GKR0083 |
| A. sessilis (L.) R.Br. ex DC. | Chanchi       | D, G, M, T| H     | Ah, Fp, | Rs   | Fl.& Fr. Throughout the year | V | GKR0439 |
| Amaranthus blitum L.      | Boutuni        | D, G, M, T| H     | Ah, Fp, | Rs   | Fl. Mar-Jun | V  | GKR0174 |
| A. gangeticus L.          | Data shak      | D, M     | H     | Ah, Fp, | Rs   | Fl. Jun-Sep | V  | GKR0547 |
| A. spinosus L.            | Katanotey      | D, G, M, T| H     | Ah, Fp, | Rs   | Fl. Jun-Dec | V  | GKR0461 |
| A. viridis L.             | Notey shak     | D, G, M, T| H     | Ah, Fp, | Rs   | Fl. Jul-Dec | V  | GKR0507 |
| Atriplex hortensis L.     | Red mountain spinach | D | H     | Fp     | C    | Fl. Jul-Sep | M, Or | GKR0656 |
| Celosia argentea L.       | Swetmorogphul  | D | H     | Fp     | C    | Fl. Jul-Sep | Or | GKR0568 |
| **PORTULACACEAE**         |                |          |       |         |      |              |     |         |
| Portulaca oleracea L.     | Chhoto Apang   | D, G, M, T| H     | Ah, Fp, | Rs   | Fl. & Fr. Dec-Jan | V | GKR0637 |
| *Enhydra fluctuans* DC.   | Helencha       | D | H     | Fp     | C    | Fl. & Fr. Through-out the year | V | GKR0388 |
| **BASELLACEAE**           |                |          |       |         |      |              |     |         |
| Basella alba L.           | Pui sak        | D, G, M, T| H     | Ah, Fp, | Rs   | Fl. Nov-Feb | D, V | GKR2614 |
| **MOLLUGINACEAE**         |                |          |       |         |      |              |     |         |
| Glinus lotoides L.        | Duserasag      | D, G, M, T| H     | Ah, Fp, | Rs   | Fl. Apr-May | V  | GKR0173 |
| *G. oppositifolius* (L.) Aug. DC. | Gima-sak    | D, G, M, T| H     | Ah, Fp, | Rs   | Fl. & Fr. Through-out the year | V | GKR0024 |
| Mollugo pentaphylla L.    | Khetpapra     | D, M, T  | H     | Ah, Fp, | Rs   | Fl. & Fr. Through-out the year | W | GKR1110 |

(Table contd.)
| Scientific Name       | Bangla name | District | Habit | Habitat | Occ.  | FL./Fr. Time | Use | RSE  |
|-----------------------|-------------|----------|-------|---------|-------|--------------|-----|------|
| **CARYOPHYLLACEAE**   |             |          |       |         |       |              |     |      |
| *Dianthus caryophyllus* L. | Jatasalpar  | G, M     | H     | Fp, Rs  | O     | Fl.Nov-Jan Fr. U | Or  | GKR2903 |
| *Polycarpum prostratum* (Forsk.) Aschers. & Schein. | Gima        | G, M     | H     | Fp, Rs  | O     | Fl. Mar-Jun Fr. Aug-Sep | W   | GKR0178 |
| *Stellaria wallichiana* Haines | Commom chickweed | G     | H     | Ah     | O     | Fl. Feb-Aug Fr. U | M   | GKR2037 |
| **POLYGONACEAE**      |             |          |       |         |       |              |     |      |
| *Persicaria assamica* (Meisn.) Sojak | Bishkathali | D       | H     | Rs     | O     | Fl. Jun-Sep Fr. U | M   | GKR0154 |
| *P. barbata* (L.) H.Hara | Bishkathali | M, T    | H     | Fp, Rs  | O     | Fl. Nov-Feb Fr. U | M   | GKR0169 |
| *P. hydropiper* (L.) Delarbre | Bishkatali  | D, M    | H     | Fp, Rs  | O     | Fl. Mar-Jul Fr. U | M   | GKR0428 |
| *P. lanata* (Roxb.) Tzvelev | Bishkatali  | D       | H     | Ah, Rs  | O     | Fl. Jun-Sep Fr. U | W   | GKR1363 |
| *P. minor* (Huds.) Opiz. | Bishkatali  | M, T    | H     | Rs     | O     | Fl. Jan-Mar Fr. U | W   | GKR0116 |
| *P. orientalis* (L.) Spach | Bara Panimari | D, G, T | H     | Fp, Rs  | O     | Fl. Jun-Oct Fr. U | W   | GKR0442 |
| *Polygonum chinense* L. | Bishkatali  | D, G, T | H     | Ah, Fp | C     | Fl. Nov-Mar Fr. U | M   | GKR1843 |
| *P. effusum* Meissn. | Chemi sag   | D       | H     | Ah, Rs  | O     | Fl. Mar-Oct Fr. U | W   | GKR1029 |
| *P. plebeium* R. Br. | Khudi bisakamtali | D, G, T | H     | Ah, Fp | Rs    | Fl. Mar-Apr Fr. U | W   | GKR0586 |
| *P. flaccidum* Meissn. | Lalbishkatali | D, M    | H     | Fp, Rs  | O     | Fl. Aug-Oct Fr. U | M   | GKR2372 |
| *Rumex dentatus* L. | Banpalong   | D       | H     | Ah, Fp | O     | Fl. May-Jun Fr. U | W   | GKR0446 |
| *R. maritimus* L. | Gangpalong  | D, G    | H     | Ah, Fp | Rs    | Fl. Feb-May Fr. U | W   | GKR0515 |
| **PLUMBAGINACEAE**    |             |          |       |         |       |              |     |      |
| *Plumbago zeylanica* L. | Chitarkhita | D       | S     | Ah     | O     | Fl. Nov-Mar Fr. U | M   | GKR1266 |
| **DILLENIACEAE**      |             |          |       |         |       |              |     |      |
| *Dillenia indica* L. | Chalta      | D, G, M,T | T     | Ah, Bb | C     | Fl. Jun-Aug Fr. U | Fr, M | GKR1057 |
| **ELAEOCARPACEAE**    |             |          |       |         |       |              |     |      |
| *Elaeocarpus floribundus* Blume | Jalpai       | D, G, M,T | T     | Fp, Hy | Rs    | Fl. Jul-Aug Fr. U | Fr, O  | GKR0067 |
| *E. tectorius* (Lour.) Poir | T           | T       | T     | Fp     | O     | Fl. May-Jun Fr. Aug-Oct | Fr, O | GKR1496 |
| **TILIACEAE**         |             |          |       |         |       |              |     |      |
| *Corchorus aestuans* L. | Banpat      | D, G    | H     | Fp     | O     | Fl. Aug-Feb Fr. U | We   | GKR0239 |
| *Grewia tenax* (Forssk.) Fiori | Chhoto Assar | D, M   | S     | Fp, Rs | O     | Fl. Feb-Aug Fr. U | H   | GKR1275 |

(Table contd.)
| Scientific Name                        | Bangla name      | District | Habit | Habitat | Occ. | FL/FR Time       | Use | RSE                          |
|---------------------------------------|------------------|----------|-------|---------|------|------------------|-----|-------------------------------|
| *Triumfetta rhomboidea* Jacq.         | Banokra          | D, G, M, T | S     | Ah, Fp, Rs | C    | Fl. Sep-Nov Fr. U | Fb, | GKR0305                       |
| **STERCULIACEAE**                     |                  |          |       |         |      |                  |     |                               |
| *Helicteres isora* L.                 | Rajot, Atmora    | G        | S     | Fp      | O    | Fl. & Fr. Sep-Mar | M   | GKR0332                       |
| **MALVACEAE**                         |                  |          |       |         |      |                  |     |                               |
| *Abelmoschus moschatus* Medik.        | Mushakdana, musk okra | D | H     | Ah, Fp | O    | Fl. Jun-Oct Fr. U | M   | GKR1390                       |
| *Abroma augusta* (L.) L.f.            | Ulat kambal      | T        | S     | Ah, Fp | CE   | Fl. Jun-Oct Fr. U | M   | GKR2090                       |
| *Abutilon indicum* (L.) Sweet         | Potari           | D, M, T  | S     | Ah, Fp, Rs | O    | Fl. Sep-Apr Fr. U | Or  | GKR0140                       |
| *Bombax ceiba* L.                     | Shimul           | D, G, M, T | T     | Fp, Rs | C    | Fl. Jan-Mar Fr. U | Fb, T | GKR1006                       |
| *Corchorus capsularis* L.             | Pat              | D        | S     | Ah, Fp, Rs | O    | Fl. Oct-Dec Fr. Feb-Mar | Fb | GKR0556                       |
| *Fioria vitifolia* (L.) Mattei        | Ban-carpus       | D        | S     | Fp      | O    | Fl. Apr-Dec Fr. U | W   | GKR1662                       |
| *Gossypium arboreum* L.               | Karpas           | M        | T     | Fp      | O    | Fl. Jun-Jul Fr. U | Fb  | GKR2623                       |
| *Grewia multiflora* Juss.             | Panisara         | D, T     | ST    | Rs      | O    | Fl. Jul-Sep Fr. U | Fw, W | GKR1335                       |
| *G. nervosa* (Lour.) Panigrahi        | Assar/ Datoi     | G        | ST    | Rs      | O    | Fl. Aug-Apr Fr. U | Fw, M | GKR0744                       |
| *Hibiscus rosa-sinensis* L.           | Joba             | D, G, M, T | S     | Ah, Fp | C    | Fl. & Fr. Through-out the year | Or | GKR1526                       |
| *H. sabdariffa* L.                    | Chukair, Chukur  | G        | S     | Rs      | O    | Fl. Apr-Jul Fr. U | Fb, V | GKR1954                       |
| *Malvastrum coromandelianum* (L.)     | Broom weed       | M        | H     | Rs      | O    | Fl. Mar-Sep Fr. U | M   | GKR1247                       |
| *Melochia corchorfolia* L.            | Banpat           | D, G, M, T | S     | Ah, Fp, Rs | C    | Fl. Jul-Apr Fr. U | Fb  | GKR0059                       |
| *Pentapetes phoenicea* L.             | Morich joba      | D, G, M, T | H     | Ah, Fp, Rs | C    | Fl. & Fr. Jun-Jan Fr. U | Fb, Or | GKR0204                       |
| *Sida acuta* Burm. f.                 | Kureta           | D, G, M, T | H     | Ah, Fp, Rs | C    | Fl. Sep-May Fr. U | M   | GKR0184                       |
| *S. cordifolia* L.                    | Jhunka           | M        | H     | Rs      | O    | Fl. & Fr. Through-out the year | M | GKR1824                       |
| *S. mysoresnis* Wight & Arn.          | Berela           | G        | H     | Fp, Rs | O    | Fl. Oct-Feb Fr. U | M   | GKR0242                       |
| *S. rhombifolia* L.                   | Berela           | D, G, M, T | H     | Fp, Rs | O    | Fl. Jul-Dec Fr. U | M   | GKR0287                       |
| *Urena lobata* L.                     | Ghagra           | D        | S     | Fp, Rs | O    | Fl. Jan-Apr Fr. U | W   | GKR0081                       |
| **LECYTHIDACEAE**                     |                  |          |       |         |      |                  |     |                               |
| *Barringtonia acatangula* (L.) Gaertn. | Hijal            | D, G, M, T | T     | Ep, Fp, Rs | C    | Fl. Mar-May Fr. U | Bb, Cw, Rp | GKR0699                       |
| **CARICACEAE**                        |                  |          |       |         |      |                  |     |                               |
| *Carica papaya* L.                    | Pepe             | D, G, M  | T     | Ah      | O    | Fl. & Fr. Through-out the year | Fr, M, V | GKR0006                       |

(Table contd.)
| Scientific Name                  | Bangla name | District | Habit | Habitat | Occ. | FL/Fr. Time       | Use | RSE   |
|---------------------------------|-------------|----------|-------|---------|------|------------------|-----|-------|
| **CUCURBITACEAE**               |             |          |       |         |      |                  |     |       |
| Bryonia cochinchinensis Lour.   | Boti-jhinga | G        | H     | Fp, Rs  | O    | Fl. May-Jul Fr. U | M   | GKR1430 |
| Coccinia grandis (L.) Voigt     | Telakuncha  | D, G, M, T | H  | Ah, Fp, Rs | C   | Fl. Dec-Mar Fr. U | M   | GKR1642 |
| Cucumis callosus (Rottler) Cogn.| Tita Bangi  | D        | H     | Fp, Rs  | O    | Fl. Jul-Jan Fr. U | Fr  | GKR1369 |
| C. sativus L.                   | Sosha       | D        | H     | Fp      | O    | Fl. Sep-Mar Fr. U | Fr,V| GKR1316 |
| Luffa cylindrica (L.) M. Roem.  | Dhundul     | D        | H     | Ah      | O    | Fl. Feb-Mar Fr. U | V   | GKR1348 |
| Momordica charantia L.          | Ucche       | D, M, T  | H     | Ah, Fp, Rs | O  | Fl. Jun-Aug Fr. U | M,V | GKR0580 |
| M. cochinchinensis (Lour.) Spreng. | Kakrol     | G        | H     | Ah      | O    | Fl. Jun-Aug Fr. U | V   | GKR0296 |
| M. dioica Roxb. ex Willd.       | Dharkarolla | D, G, M | H    | Ah, Fp, Rs | O  | Fl. Jul-Dec Fr. U | V   | GKR0794 |
| M. subangulata Blume            | Kalak       | D, T     | H     | Ah, Fp  | O    | Fl. Jun-Aug Fr. U | V   | GKR0662 |
| Mukia maderaspatana (L.) M. Roem.| Agmukhi, Bilari | D, M H | H     | Fp      | O    | Fl. & Fr. Throughout the year | M   | GKR1647 |
| Trichosanthes cordata Roxb.     | Chichinga, Rekha | D, H | H     | Fp      | O    | Fl. Jul-Aug Fr. U | V   | GKR1688 |
| T. dioica Roxb.                 | Potol       | T        | H     | Rs      | O    | Fl. Feb-Sep Fr. U | V   | GKR1557 |
| T. tricuspidata Lour.           | Makal       | M        | H     | Ah      | O    | Fl. & Fr. Throughout the year | W   | GKR1394 |
| Zehneria japonica (Thunb.) H.Y. Liu | Rakhalshasha | M        | H     | Rs      | O    | Fl. Apr-Jul Fr. U | M   | GKR0084 |
| Z. thwaitesii (Schweinf.) C.Jeffrey | Unknown  | M        | H     | Ah, Fp  | O    | Fl. Aug-Dec Fr. U | W   | GKR2503 |
| **SALICACEAE**                  |             |          |       |         |      |                  |     |       |
| Flacourtia indica (Burm. f.) Merr. | Beuchi, Katai | D, G S | Rs    | O       |      | Fl. & Fr. Nov-Mar | W   | GKR1535 |
| F. jangoums (Lour.) Raeus.      | Lukluki     | D, G, M  | ST    | Ah, Fp  | O    | Fl. Mar-Apr Fr. Aug-Oct | Fr  | GKR0342 |
| Salix tetrasperma Roxb.         | Boishakhi, Panijama | M, T | Ah    | O       |      | Fl. Jan-Feb Fr. U | Fw  | GKR0158 |
| **CAPPARACEAE**                 |             |          |       |         |      |                  |     |       |
| Capparis zeylanica L.           | Asarilata,  | G, T S   | Ah, Fp, Rs | O    |      | Fl. Mar-May Fr. U | M   | GKR0375 |
| Cleome rutidosperma DC.         | Begumihurhury | D, G H | Ah, Fp, Rs | O    |      | Fl. May-Nov Fr. U | W   | GKR0491 |
| Crateva magna (Lour.) DC.       | Borna       | D, G, M, T | Ep, Rs | C     |      | Fl. Mar-Apr Fr. U | Fw  | GKR1528 |
| **BRASSICACEAE**                |             |          |       |         |      |                  |     |       |
| Brassica napus L.               | Sorisha     | G, M H   | Ah, Fp | O      |      | Fl. Mar-Aug Fr. U | O   | GKR0151 |

(Table contd.)
| Scientific Name                  | Bangla name          | District | Habit | Habitat | Occ. | FL./Fr. Time       | Use | RSE  |
|--------------------------------|----------------------|----------|-------|---------|------|-------------------|-----|------|
| *B. nigra* (L.) K.Koch          | Kalo Sarisha, Rai Sarisha | D, G, M | H     | Ah      | O    | Fl. Mar-May Fr. U | O   | GKR0718 |
| *Rorippa indica* (L.) Hiern     | Bon Sorisa           | D, G, M | H     | Ah, Fp, Rs | O    | Fl. Mar-Apr Fr. U | W   | GKR0455 |
| **MORINGACEAE**                 |                      |          |       |         |      |                   |     |      |
| *Moringa oleifera* Lamk.        | Sajna                | D        | T     | Ah, Ep, Fp | O    | Fl. Jan-Mar Fr. U | M, V | GKR0572 |
| **SAPOTACEAE**                  |                      |          |       |         |      |                   |     |      |
| *Chrysophyllum cainito* L.      | Star apple           | D, M T   | Ah, Rs, Fp | O    | Fl. Jul-Aug Fr. U | Fr, W, T | GKR1331 |
| *Madhuca longifolia* (J.Koenig ex L.) J.F.Macbr. | Mohua               | M T      | Hy | O  | Fl. Mar-May Fr. U | M   | GKR1932  |
| *Manilkara zapota* (L.) P.Royen | Safeda               | D, G, M, T | Ah, Fp  | C    | Fl. Aug-Oct Fr. U | Fr   | GKR0118  |
| *Mimusops elengi* L.            | Bokul                | D, G, M, T | Ah | C  | Fl. Mar-Jun Fr. U | Or   | GKR1702  |
| **EBENACEAE**                   |                      |          |       |         |      |                   |     |      |
| *Diospyros discolor* Wild.      | Bilati gab           | D, G, M, T | Bb, Fp, Rs | C | Fl. May-Aug Fr. U | Fr, T | GKR0034  |
| *D. montana* Roxb.              | Tomal                | D, T T   | Fp, Rs | O    | Fl. Mar-Apr Fr. U | T    | GKR0658  |
| *D. malabarica* (Desr.) Kostel. | Deshi gab            | D, G, M, T | Ah, Bb, Fp | C | Fl. May-Jun Fr. U | Fr, M, T | GKR0715  |
| *D. peregrina* (Gaertn.) Gürke  | Gab                  | M T      | Ah    | O    | Fl. Jan-Feb Fr. U | D, M | GKR1586  |
| *D. philippinensis* A.DC        | Bilatigab            | D, T T   | Fp, Rs | O    | Fl. Apr-Jun Fr. U | Fr   | GKR1498  |
| **MYRSINACEAE**                 |                      |          |       |         |      |                   |     |      |
| *Ardisia humilis* Vahl          | Banjam               | G, M S | Fp, Rs | O    | Fl. Mar-Dec Fr. U | M    | GKR0019  |
| **PRIMULACEAE**                 |                      |          |       |         |      |                   |     |      |
| *Androsace umbellata* (Lour.) Merr. | Unknown             | D, M H   | Rs    | O    | Fl. Feb-Apr Fr. U | W    | GKR0125  |
| **CRASSULACEAE**                |                      |          |       |         |      |                   |     |      |
| *Kalanchoe pinnata* (Lam.) Pers. | Patharkuchi         | D, G, M | H     | Ah    | O    | Fl. Jan-Mar Fr. U | M   | GKR2490  |
| **ROSACEAE**                    |                      |          |       |         |      |                   |     |      |
| *Rosa chinensis* Jacq.          | Golap                | D S      | Ah    | O    | Fl. Apr-Sep Fr. U | Or   | GKR1526  |
| **MIMOSACEAE**                  |                      |          |       |         |      |                   |     |      |
| *Mimosa pudica* L.              | Lajjabati            | D, G H   | Fp, Rs | O    | Fl. Nov-Mar Fr. U | M    | GKR0414  |
| **CAESALPINIACEAE**             |                      |          |       |         |      |                   |     |      |
| *Senna occidentalis* (L.) Linka | Barakalkasunda       | D, G S   | Fp, Rs | O    | Fl. & Fr. Throughout the year | M   | GKR0721  |
| *S. sophra* (L.) Roxb.          | Chhotokalkasunda     | D, G H   | Fp, Rs | O    | Fl. Nov-Feb Fr. U | M    | GKR0232  |
| *S. tora* (L.) Roxb.            | Kalkasunda           | D, G, M, T | Fp, Rs | C | Fl. & Fr. Throughout the year | M    | GKR1118  |

(Table contd.)
| Scientific Name | Bangla name | District | Habit | Habitat | Occ. | FL/Fr. Time | Use | RSE |
|-----------------|-------------|----------|-------|---------|------|--------------|-----|-----|
| **FABACEAE**    |             |          |       |         |      |              |     |     |
| *Acacia auriculiformis* Benth. | Akashmoni | D, G, M | T | Fp, Rs | O | Fl. Dec-Mar Fr. U | T | GKR1067 |
| *A. nilotica* (L.) Delile | Babla | G, M | T | Fp, Rs | O | Fl. Jul-Dec Fr. U | M | GKR2014 |
| *Albizia lebbeck* (L.) Benth. | Sirish, Kalokoroi | D, G, M | T | Ah, Rs | O | Fl. Mar-May, Fr.- Aug-Oct | T | GKR0508 |
| *A. lucida* Benth. | Motor Koroi, Potka Siris | D, G, M | T | Rs | O | Fl. Jun-Jul Fr. U | T | GKR0336 |
| *A. procera* (Roxb.) Benth. | Sada Siris,Koroi | D, G, M, T | T | Fp, Rs | C | Fl. Sep-Feb Fr. U | T | GKR0641 |
| *A. richardiana* (Voigt) King & Prain | Gagansirish, Rajkoroi | D, G, M, T | T | Fp, Rs | C | Fl. Mar-May Fr. U | T | GKR1705 |
| *A. saman* (Jacq.) Merr. | Rain-tree | D, G, M, T | T | Fp, Rs | C | Fl. Mar-Jun Fr. U | T | GKR1246 |
| *Alysicarpus ovalifolius* (Schum.) Leonard | False moneywort | T | H | Fp, Rs | O | Fl. Jun-Sep Fr. U | W | GKR1071 |
| *Arachis hypogea* L. | Cheenabadam | D | H | Fp | O | Fl. Jul-Aug Fr. U | O | GKR1367 |
| *Bauhinia acuminata* L. | kanchan | D, G, M, T | S | Fp, Rs | C | Fl. Apr-May Fr. U | M | GKR1525 |
| *Butea monosperma* (Lam.) Taub. | Palash | G, M, T | T | Ah | O | Fl. Feb-Apr Fr. U | M | GKR2047 |
| *Cajanus cajan* (L.) Millsp. | Arhar | G, M, T | H | Ah, Rs | O | Fl. Dec-Mar Fr. U | C | GKR0164 |
| *Canavalia ensiformis* (L.) DC. | Jack bean | D | H | Ah | O | Fl. May-Oct Fr. U | V | GKR1630 |
| *Cassia fistula* L. | Sonalu, Bador lathi | D, G, M, T | H | Fp | C | Fl. Mar-Sep Fr. U | M | GKR1564 |
| *Clitoria ternatea* L. | Oporazita | M | H | Rs | O | Fl. Mar-May Fr. U | M | GKR1839 |
| *Crotalaria juncea* L. | Jhunjuni | D, G, M, T | H | Fp, Rs | O | Fl. Sep-Jan Fr. U | W | GKR1675 |
| *Dalbergia sissoo* DC. | Sissoo | D, G, M, T | T | Fp, Rs | C | Fl. Mar-Jul Fr. U | T | GKR1673 |
| *Delonix regia* (Hook.) Raf. | Krishnachura | D, G, M, T | T | Bb, Fp, Rs | C | Fl. Mar-Oct Fr. U | Or | GKR1089 |
| *Desmodium gangeticum* (L.) DC. | Salpani | D, G, M, T | H | Ah, Fp, Rs | C | Fl. Oct-Dec Fr. U | M | GKR0299 |
| *D. motorium* (Houtt.) Merr. | Turup Chandal | M | H | Fp | O | Fl. Oct-Jan Fr. U | M | GKR1864 |
| *D. triflorum* (L.) DC. | Kulaliya | D, G, M, T | H | Ah, Fp, Rs | C | Fl. Jul-Dec Fr. U | W | GKR1059 |
| *Erythrina fusca* Lour. | Palita mandar | M | T | Ah, Rs | O | Fl. Feb-Apr Fr. U | W | GKR1840 |
| *E. orientalis* Murray | Mandar/Parijat | D, G, M, T | T | Ah, Fp, Rs | C | Fl. Jul-Nov Fr. U | W | GKR0953 |

(Table contd.)
| Scientific Name                  | Bangla name       | District | Habit | Habitat | Occ. | FL./Fr. Time     | Use | RSE   |
|---------------------------------|-------------------|----------|-------|---------|------|------------------|-----|-------|
| *E. stricta* Roxb.              | Mandar            | D, G     | T     | Ah, Fp  | O    | Fl. Jan-May Fr. U | W   | GKR1317 |
| *Lablab purpureus* (L.) Sweet   | Shim              | G        | H     | Fp      | O    | Fl. Jul-Sep Fr. U | V   | GKR1992 |
| *Lathyrus aphaca* L.            | Kasari            | M        | H     | Rs      | O    | Fl. Feb-Apr Fr. U | C   | GKR0220 |
| *Leucaena leucocephala* (Lam.) de Wit | Ipil-Ipil     | D, G, M, T | Fp, Rs | C    | Fl. Apr-Jul Fr. U | Fw  | GKR1396 |
| *Medicago lupulina* L.          |                   | T        | H     | Ah, Fp  | O    | Fl. Apr-Aug Fr. U | W   | GKR1633 |
| *Macuna bracteata* DC. ex Kurz  | Unknown           | D        | S     | Rs      | E    | Fl. Jan-Apr Fr. U | W   | GKR1270 |
| *M. pruriens* (L.) DC.          | Alkushi           | G        | H     | Fp      | O    | Fl. Sep-Oct Fr. Oct-Nov | M   | GKR1997 |
| *Pithecellobium dulce* (Roxb.) Benth. | Gilapi fal      | D, M    | T     | Ah, Rs  | O    | Fl. Dec-Feb Fr. U | Fd, Fw | GKR1386 |
| *Pterocarpus macrocarpus* Kurz   | Gumbury           | D, G    | T     | Rs      | O    | Fl. Feb-Apr Fr. U | T   | GKR1703 |
| *P. santalinus* L.f.            | Raktachandan      | M        | T     | Ah      | CE   | Fl. Feb-Apr Fr. U | D, M, O | GKR2510 |
| *Senna obtusifolia* (L.) Irwin & Barneby | Chakunda, Gol Eski | M, T | H | Rs | O | Fl. Jul-Dec Fr. U | M | GKR2101 |
| *Sesbania canabina* (Retz.) Poir. | Dhanchi         | D        | H     | Ah      | O    | Fl. Jul-Dec Fr. U | W   | GKR1282 |
| *S. sesban* (L.) Merr.          | Dhancha           | D        | S     | Fp      | O    | Fl. & Fr. Sep-Dec | W   | GKR1327 |
| *Tamarindus indica* L.          | Tentul            | D, G, M | T     | Bb, Fp  | Rs   | Fl. Apr-Jun Fr. U | Fr, T | GKR1610 |
| *Tephrosia purpurea* (L.) Pers. | Jangli neel       | D        | H     | Fp      | O    | Fl. Oct-Dec Fr. U | W   | GKR1670 |
| *Uuraria lagopus* DC.           | Chakuley, Chakulia | G    | H     | Rs      | O    | Fl. Sep-Nov Fr. U | W   | GKR0260 |
| *Vigna mungo* (L.) Hepper       | Maskolai          | D, M    | H     | Ah, Fp  | O    | Fl. Nov-Dec Fr. U | C   | GKR1163 |

**LYTHRACEAE**

| Scientific Name                  | Bangla name                      | District | Habit | Habitat | Occ. | FL./Fr. Time     | Use | RSE   |
|---------------------------------|----------------------------------|----------|-------|---------|------|------------------|-----|-------|
| *Ammania multiflora* Roxb.       | Many-flower ammannia             | T        | H     | Fp, Rs  | O    | Fl. & Fr. Sep-Dec | W   | GKR2161 |
| *A. baccifera* L.               | Banmarich                       | M        | H     | Rs      | O    | Fl. Sep-Dec Fr. U | W   | GKR0214 |
| *Lagerstroemia indica* L.       | Chhotorajaril                   | G, M, T | Fp, Rs | O | Fl. Jun-Sep Fr. U | T   | GKR2288 |
| *L. parviflora* Roxb.           | Tilajarul                       | G, T    | T     | Rs      | O    | Fl. Feb-May Fr. U | T   | GKR2869 |
| *L. speciosa* (L.) Pers.        | Pannyajarul                     | G        | T     | Rs      | O    | Fl. Jun-Aug Fr. U | T   | GKR0281 |
| *Lawsonia inermis* L.           | Mehedi                          | D, G, M, T | Ah | C | Fl. Jan-Apr Fr. U | D   | GKR0311 |
| *Rotala rotundifolia* (Buch.-Ham. ex Roxb.) Koehne | Unknown | M  | H | Rs | O | Fl. & Fr. Sep-Mar | W   | GKR0156 |

(Table contd.)
| Scientific Name | Bangla name | District | Habit | Habitat | Occ. | FL./Fr. Time | Use | RSE |
|-----------------|-------------|----------|-------|---------|------|--------------|-----|-----|
| **MYRTACEAE**   |             |          |       |         |      |              |     |     |
| Eucalyptus camaldulensis Dehnhardt | Eucalyptus | D, G, M, T | T | Fp, Rs | C | Fl. Jul-Feb Fr. U | T | GKR1167 |
| Psidium guajava L. | Peyara | D, G, M | T | Ah | O | Fl. Mar-May Fr. U | Fr, M | GKR0030 |
| Syzygium cumini (L.) Skeels | Jam | D, G, M, T | T | Ah | C | Fl. Mar-May Fr. U | Fr, T | GKR3248 |
| S. fruticosum DC. | Putijam | D, G, M, T | T | Fp, Rs | C | Fl. Mar-Apr Fr. U | W | GKR4668 |
| S. samarangense (Blume) Merr. & L.M.Perry | Jamrul | D, G, M, T | T | Fp | C | Fl. Feb-Mar Fr. U | Fr | GKR2108 |
| S. jambos (L.) Alston | Golapjam | D, G, M | T | Ah, Fp | O | Fl. Feb-Apr Fr. U | Fr | GKR1940 |
| **PUNICACEAE**  |             |          |       |         |      |              |     |     |
| Punica granatum L. | Anar | D, G, M, T | ST | Ah, Hy | C | Fl. May-Jul Fr. U | Fr | GKR3094 |
| **ONAGRACEAE**  |             |          |       |         |      |              |     |     |
| Ludwigia adscendens (L.) Hara | Keshordam | G | H | Ah, Fp | O | Fl.& Fr. Throughout the year We | We | GKR0837 |
| L. hyssopifolia (G. Don) Exell | Panimarich | D, G, M, T | H | Ah, Fp, Rs | C | Fl. Dec-Jan Fr. U | Aq we | GKR0524 |
| L. perennis L. | Banlong | M, T | H | Fp, Rs | O | Fl. & Fr. Throughout the year We | We | GKR0086 |
| **COMBRETACEAE** |             |          |       |         |      |              |     |     |
| Quisqualis indica (Thunb.) Gagnep. | Madhobilata | D, T | S | Fp, Rs | O | Fl. Mar-Nov Fr. U | Or | GKR1542 |
| Terminalia arjuna (Roxb. Ex DC.) Wight & Arn. | Arjun | M | T | Rs | O | Fl. Apr-Jul Fr. U | M | GKR1861 |
| T. bellirica (Gaertn.) Roxb. | Bohera | D, G | T | Rs | O | Fl. Apr-May Fr. U | M | GKR2006 |
| T. chebula Retz. | Haritaki | D, G, M, T | T | Ah, Fp, Rs | C | Fl. Mar-May Fr. U | M | GKR0330 |
| T. catappa L. | Kat badam | D, M, T | T | Fp, Rs | O | Fl. Mar-Jun Fr. Jul-Sep M, T | M, T | GKR0664 |
| **CORNACEAE**   |             |          |       |         |      |              |     |     |
| Alangium salviifolium (L.f.) Wangerin | Aikha | D, G, M, T | T | Bb, Fp | C | Fl. Mar-Aug Fr. U | Fw | GKR1153 |
| **OLACACEAE**   |             |          |       |         |      |              |     |     |
| Olax acuminata Wall, ex Benth. | Unknown | M, T | ST | Rs | O | Fl. Mar-Sep Fr. U | M | GKR0282 |
| **LORANTHACEAE** |             |          |       |         |      |              |     |     |
| Dendrophthoe falcata (L. f.) Etting. | Maandaa, Bandha, Pharulla | T | S | Rs | O | Fl. Jan-Feb Fr. U | M | GKR2221 |
| Helixanthera cylindrica (Jack ex Roxb.) Danser | Unknown | D | H | Fp, Rs | O | Fl. Jun-Aug Fr. U | W | GKR1606 |
| **PUTRANJIVACEAE** |             |          |       |         |      |              |     |     |
| Putranjiva roxburghii Wall. | Putranjiva | M | T | Rs | O | Fl. Mar-Aug Fr. U | M | GKR1238 |

(Table contd.)
| Scientific Name                  | Bangla name        | District | Habit | Habitat | Occ. | FL/FR Time       | Use | RSE   |
|---------------------------------|--------------------|---------|-------|---------|------|------------------|-----|-------|
| **EUPHORBIACEAE**               |                    |         |       |         |      |                  |     |       |
| Acalypha ciliata Forssk.        | Muktajhuri         | D, M, T | H     | Ah, Fp, | O    | Fl. Nov-Aug Fr. U|M    | GKR1337 |
| A. indica L.                    | Muktajhuri         | D, G, M, T | H | Ah, Fp, | C    | Fl. Mar-Oct Fr. U|M    | GKR0467 |
| Baliospermum montanum (Willd.) Muell.-Arg. | Dandi, Danti | D | S | Fp, Rs | O    | Fl. Aug-Mar Fr. U|M    | GKR0510 |
| Bridelia tomentosa Blume        | Khoi, Serai        | G, T S  | Rs    | O      | Fr. & Fr. Through-out the year | W    | GKR0250 |
| Chrozophora rottleri (Geiseler) A. Juss. ex Spreng. | Khudi Ojra        | D, G | H | Rs    | O    | Fl. Feb-Aug Fr. U|M    | GKR0394 |
| C. indica L.                    | Karu, Kadu, Chireta | D, M S | Fp, Rs | O | Fl. Feb-Sep Fr. U|M    | GKR0040 |
| C. picta (Vahl) A.Juss. ex Spreng. | Pata bahar          | D, G, M, T | T | Ah, Fp | C    | Fl. Mar-Jun Fr. U|Or   | GKR0149 |
| Croton bonplandianum Baill.     | Banmarich          | D, G, M, T | H | Fp, Rs | C    | Fl. Nov-May Fr. U|M    | GKR0478 |
| C. roxburghii Balakr.           | Baragachh, Mashimud, Putla | G, T H | Rs    | O    | Fl. & Fr. Through-out the year | M    | GKR0339 |
| C. caudatus Geiseler            | Climbing Croton    | T S     | Rs    | O    | Fl. Mar-May Fr. U|M    | GKR0140 |
| Euphorbia cotinifolia L.        | Red Spurge         | T S     | Rs    | O    | Fl. Mar-Jun Fr. U|Or   | GKR2190 |
| E. heterophylla L.              | milkweed           | D H     | Fp    | O    | Fl.& Fr. Through-out the year | W    | GKR0493 |
| E. hirta L.                     | Dudhia             | D, G, M, T | H | Ah, Fp | C    | Fl. & Fr. Through-out the year | M    | GKR0486 |
| E. milii Des Moul.              | Kontok Mukut       | G S     | Rs    | O    | Fl. Apr-Aug Fr. U|M    | GKR0509 |
| E. prostrata Ait.               | red euphorbia      | D, G H  | Ah, Fp | Rs | Fl. Mar-Jun Fr. U|M    | GKR0416 |
| E. thymifolia L.                | Swetkan, Swetkan   | D, G, M, T | H | Ah, Fp | C    | Fl. Nov-May Fr. U|We   | GKR0482 |
| E. tirucalli L.                 | Lankasij           | G S     | Rs    | O    | Fl. May-Jul Fr. U|M    | GKR0798 |
| Excoecaria bicolor (Hassk.) Zoll. ex Hassk. | Laily Majnu | M S     | Rs    | O    | Fl. Jan-Apr Fr. U|Or   | GKR0005 |
| Flueggea microcarpa Blume       | Shikori, Sitka, Sitki | M S | Rs    | O    | Fl. Mar-Sep Fr. U|W    | GKR0082 |
| Glochidion assamicum (Müll . Arg.) Hook. f. | Poniator, Dostomi | M S | Fp, Rs | O    | Fl. Nov-Feb Fr. U|M    | GKR0136 |
| Hevea brasiliensis (Willd. ex A.Juss.) Müll.Arg. | Rubber | D, G, M, T | T | Bb, Fp, Rs | C    | Fl. May-Aug Fr. U|R    | GKR1628 |
| Jatropha curcas L.              | Baghherenda        | D S     | Rs    | O    | Fl. Apr-Jul Fr. U|M, O  | GKR1626 |
| J. gossypifolia L.              | Lalbherenda        | D S     | Rs    | O    | Fl. Jul-Sep Fr. U|M    | GKR1653 |

(Table contd.)
| Scientific Name                        | Bangla name    | District | Habit | Habitat | Occ. | FL./Fr. Time   | Use    | RSE  |
|--------------------------------------|----------------|----------|-------|---------|------|----------------|--------|------|
| *J. panduraefolia* Andri             | Joyti          | M        | S     | Fp, Rs  | O    | Fl. & Fr. Throughout the year | Or     | GKR2089 |
| *Macaranga denticulata* (Blume) Müll.Arg. | Bura, Ratabura | M, T    | T     | Fp, Rs  | O    | Fl. Apr-Jun Fr. May-Oct | Fw, W  | GKR1668 |
| *M. indica* Wight                    | Chakkula       | D, G    | T     | Fp      | O    | Fl. Oct-Dec Fr. U     | Fw, W  | GKR0571 |
| *M. petiolata* (Roxb.) Müll.Arg.     | Chakkula,      | D, G,   | T     | Fp, Rs  | O    | Fl. Jan-Feb Fr. U    | Fw, T  | GKR0352 |
| *Mallotus philippensis* (Lam.) Müll.-Arg. | Sindur,       | T       | T     | Rs      | O    | Fl. Jan-Mar Fr. U    | M      | GKR0295 |
| *M. repandus* (Willd.) Müll.-Arg.    | Bon notoy      | G, T    | H     | Ah, Fp  | O    | Fl. Mar-May Fr. U    | M      | GKR0290 |
| *Pedilanthus tithymaloides* (L.) Poit. | Rangchita      | M, T    | H     | Fp      | O    | Fl. Jun-Aug Fr. U    | Or     | GKR0918 |
| *Phyllanthus niruri* L.              | Bhui amla      | D, T    | S     | Rs      | O    | Fl. Jul-Oct Fr. U    | M      | GKR1015 |
| *Ricinus communis* L.                | Venna, Reri    | D, G,   | ST    | Ah, Fp, Rs | C  | Fl. May-Jun Fr. U | O      | GKR0475 |
| *Suregada multiflora* (A. Juss.) Bail. | Ghotlatkon   | G       | T     | Rs      | O    | Fl. Mar-May Fr. U    | Fw     | GKR2026 |
| *Trewia nudiflora* L.                | Latim          | D, G,   | T     | Rs      | C    | Fl. & Fr. May-Nov   | W      | GKR0123 |

**PHYLLANTHACEAE**

| Scientific Name                        | Bangla name    | District | Habit | Habitat | Occ. | FL./Fr. Time   | Use    | RSE  |
|--------------------------------------|----------------|----------|-------|---------|------|----------------|--------|------|
| *Antidesma ghaesembilla* Gaertn.      | Black Currant Tree | M        | S     | Rs      | O    | Fl. Mar-Sep Fr. Jun-Dec | Fr     | GKR2075 |
| *A. acidum* Retz.                     | Mutta, Mathagach | M        | S     | Rs      | O    | Fl. Mar-Oct Fr. Jun-Jan | W      | GKR0219 |
| *Baccaurea motleyana* (Müll.Arg.) Müll.Arg. | Lotkon,        | D, G,   | T     | Ah, Bb, Fp | C  | Fl. Mar-Oct Fr. U | Fr     | GKR0789 |
| *Emblica officinalis* Gaertn.         | Amlaki         | M        | T     | Ah      | O    | Fl. Feb-May Fr. Jun-Sep | M      | GKR1918 |
| *Phyllanthus acidus* (L.) Skeels      | Orboroi        | D, G,   | T     | Ah, Hy  | C    | Fl. Jan-Jun Fr. Jun-Aug | Ch, M  | GKR0065 |
| *P. reticulatus* Poir.                | Chitki, Panseuli | D, G,  | S     | Ah, Fp, Rs | C  | Fl. Jul-Sep Fr. U  | W      | GKR0087 |
| *P. urinaria* L.                      | Hazarmani      | G, M,   | H     | Fp, Rs  | C    | Fl. Jul-Oct Fr. U   | M      | GKR1968 |

**RHAMNACEAE**

| Scientific Name                        | Bangla name    | District | Habit | Habitat | Occ. | FL./Fr. Time | Use | RSE  |
|--------------------------------------|----------------|----------|-------|---------|------|--------------|-----|------|
| *Ziziphus mauritiana* Lamk.           | Kul, Boroai    | D, T    | T     | Rs      | O    | Fl. Jul-Nov Fr. U | Fr   | GKR1611 |
| *Z. rugosa* Lam.                      | Bon boroai     | T       | ST    | Rs      | O    | Fl. Jan-Apr Fr. U | W   | GKR0283 |

**VITACEAE**

| Scientific Name                        | Bangla name    | District | Habit | Habitat | Occ. | FL./Fr. Time | Use | RSE  |
|--------------------------------------|----------------|----------|-------|---------|------|--------------|-----|------|
| *Ampelocissus barbata* (Wall.) Planch.| Jarila-lahari  | M        | H     | Rs      | O    | Fl. Mar-Sep Fr. U | M   | GKR0138 |
| *A. latifolia* (Roxb.) Planch.       | Gowlai Lata, Pani-lata | G, M  | H     | Ah      | O    | Fl. May-Jun Fr. Oct | M   | GKR0047 |
| *Cayratia japonica* (Thunb.) Gagnep. | Bushkiller     | D, T    | H     | Ah, Fp  | O    | Fl. Mar-Jun Fr. U  | M   | GKR1540 |
| Scientific Name                              | Bangla name         | District | Habit | Habitat       | Occ. | FL/Fl. Time          | Use | RSE  |
|---------------------------------------------|---------------------|----------|-------|---------------|------|----------------------|-----|------|
| C. trifolia (L.) Domin                       | Amal-lata           | D, G, M, T | S     | Ah, Fp, Rs    | C    | Fl. & Fr. Throughout the year | M   | GKR0100 |
| Cissus adnata Roxb.                          | Alianga lata, Bhatia-lota. | G       | S     | Fp            | O    | Fl. Jun-Jul, Fr. Aug-Sep | M   | GKR0889 |
| Lea acuminata Wall. ex Clarke               | Kukur-jihwa        | D        | S     | Fp            | O    | Fl. Aug-Oct | W   | GKR1692 |
| L. macrophylla Roxb. ex Hornem.             | Dholsanudra, Hathikani | D       | S     | Rs            | O    | Fl. Jul-Sep, Fr. U | M   | GKR1259 |
| L. robusta Roxb.                            | Unknown             | D, T     | S     | Ah            | O    | Fl. Jul-Dec Fr. U | W   | GKR1961 |
| Tetrastigma bracteolatum (Wall.) Planch.    | Golgoti lata       | D        | S     | Fp            | O    | Fl. & Fr. Aug-Oct | W   | GKR1683 |
| T. leucostaphylum (Dennst.) Alston          | Indian Chestnut Vine | D       | S     | Fp            | O    | Fl. Mar-Aug Fr. U | W   | GKR1680 |
| Vitis vinifera L.                           | Angur               | M        | H     | Ah            | O    | Fl. May-Jul Fr. U | Fr  | GKR0121 |
| LINACEAE                                    | Linum usitatissimum L. | Tisi     | M     | Rs            | O    | Fl. Jun-Aug, Fr. Jul-Oct | O   | GKR0049 |
| SAPINDACEAE                                 | Cardiospermum halicacabum L. | Latapatkari, Kapalpurthi | D | H | Rs | O | Fl. Jul-Feb Fr. U | M | GKR1349 |
| Dimocarpus longan Lour.                     | Kath litchi        | D, G, T  | Ah   | O             |     | Fl. Apr-Aug Fr. U | Fr  | GKR0354 |
| Lepisanthes rubiginosa (Roxb.) Leenh.       | Bon lichu, KakJan/Horina | G, T   | T | Rs | O | Fl. Mar-May Fr. U | M | GKR0281 |
| L. senegalensis (Poir.) Leenh.              | Gotahorina         | D, G, T | Ah, Rs | O | Fl. Nov-Jun Fr. U | M | GKR0728 |
| Litchi sinensis Sonner                      | Lichu              | D, G, M  | T | Ah, Fp | O | Fl. Jan-Mar Fr. U | Fr  | GKR1103 |
| BURSERACEAE                                 | Garuga pinnata Roxb. | Kapila, Jum | D | T | Rs | O | Fl. Feb-May Fr. U | W | GKR2604 |
| ANACARDIACEAE                               | Lannea coromandelica (Houtt.) Merr. | Jiga, Jika, Jeol | D | G | T | Fp, Rs | O | Fl. & Fr. Jan-May Fr. Re, T | GKR2997 |
| Mangifera indica L.                         | Aam                 | D, G, M  | T | Fp, Rs | O | Fl. Jan-Mar Fr. May-Jun Fr. T | Fr, T | GKR0079 |
| Spondias mombin L.                          | Amra                | D, G, M  | T | Ah, Fp | O | Fl. Jan-May Fr. U | Fr, M | GKR0393 |
| MELIACEAE                                   | Aphananixis polyspachya (Wall.) R.Parker | Roina, Pitraj | D, G | M, T | Ah, Rs | C | Fl. Oct-Feb Fr. U | O, T | GKR0328 |
| Azadirachta indica A. Juss.                 | Neem                | D, G, T  | Rs   | O             |     | Fl. Feb-Apr Fr. U | M | GKR0412 |
| Cedrela odorata L.                          | Cedar               | D        | T     | Ah, Rs | O | Fl. Jan-Jun Fr. U | T   | GKR2339 |
| Dysoxylum excelsum blume.                   | Dingori             | T        | T     | Rs          | O   | Fl. Dec-Jul Fr. Jun-Jul | T   | GKR0958 |
| (Table contd.)                              |                     |          |       |              |     |                     |     |      |
| Scientific Name | Bangla name | District | Habit | Habitat | Occ. | FL./Fr. Time | Use | RSE |
|-----------------|-------------|----------|-------|---------|------|--------------|-----|-----|
| Khaya anthotheca (Welw.) C.DC. | Lambu | D, G, M | T | Fp, Rs | O | Fl. Sep-Dec Fr. U | T | GKR1021 |
| Swietenia mahagoni L. | Mehagoni | D, G, M | T | Fp | O | Fl. Apr-May Fr. U | T | GKR0924 |
| Toona ciliata M.Roem. | Tun | M | T | Rs | O | Fl. & Fr. Feb-May | W | GKR0032 |
| **RUTACEAE** | | | | | | | | |
| Aegle marmelos (L.) Corr. | Bel | D, G, M, T | T | Ah, Fp, Rs | C | Fl. Mar-Jun Fr. U | Fr, M | GKR1372 |
| Citrus limon (L.) Osbeck. | Goralebu, Baralebu | D, G, M, T | ST | Ah, Fp | C | Fl. & Fr. Throughout the year | M, O | GKR1572 |
| C. grandis (L.) Osbeck | Jambura | D, G, M | T | Ah, Hy | O | Fl. Feb-Apr Fr. U | Fr, M | GKR1743 |
| C. reticulata Blanco | Kamla | T | ST | Fp | O | Fl. Sep-Nov Fr. U | Fr, M | GKR1342 |
| Feronia elephantum Corrêa | Kodbel | D, G, M, T | T | Fp, Rs | C | Fl. Feb-Mar Fr. U | Fr, M | GKR2962 |
| Glycosmis pentaphylla (Retz.) DC. | Motkila, Asheora | D, G, M, T | S | Ah, Fp, Rs | C | Fl. Feb-Apr Fr. U | Fr, M | GKR0054 |
| Murraya koenigii (L.) Spreng. | Curry pata | M | S | Ah, Rs | O | Fl. Mar-May Fr. U | M | GKR1866 |
| *M. paniculata* (L.) Jack | Kamini | M, T | ST | Ah, Rs | O | Fl. Mar-May Fr. U | Pi | GKR2382 |
| Zanthoxylum rhetsa DC. | Bajna | G | T | Rs | O | Fl. Mar-Nov Fr. U | O | GKR0338 |
| **OXALIDACEAE** | | | | | | | | |
| Averrhoa carambola L. | Kamranga | M, T | T | Ah | O | Fl. & Fr. Throughout the year | Fr | GKR2535 |
| Oxalis corniculata L. | Amrul | D, G, T | H | Ah, Fp, Rs | O | Fl. Jun-Aug Fr. U | We | GKR0445 |
| **APICACEAE** | | | | | | | | |
| Centella asiatica (L.) Urban | Thankuni | D, G, M, T | H | Ah, Fp, Rs | C | Fl. Apr-May Fr. U | M | GKR0018 |
| Coriandrum sativum L. | Dhonia | M | H | Rs | O | Fl. Dec-Apr Fr. U | S | GKR0182 |
| Eryngium foetidum L. | Bilatidhania | D, M, T | H | Fp, Rs | O | Fl. Apr-May Fr. U | S | GKR0729 |
| Oenanthe crocata L. | Water-hemlock | D, T | H | Fp | O | Fl. Jun-Sep Fr. U | P | GKR3404 |
| **APOCYNACEAE** | | | | | | | | |
| Alstonia scholaris (L.) R. Br. | Chhatin | D, G, M, T | T | Ep, Fp, Rs | C | Fl. Oct-Feb Fr. U | Fw, T | GKR0754 |
| Carissa carandas L. | Koromcha | D, T | S | Ah | O | Fl. Jan-Jun Fr. U | Fr | GKR0320 |
| Gymnema inodorum (Lour.) Decne. | Unknown | D | S | Fp | O | Fl. Jun-Aug Fr. U | M | GKR0141 |
| Holarrhena antidysenterica (L.) Wall | Kurchi | D, G | S | Rs | O | Fl. Apr-Oct Fr. U | M | GKR0353 |
| Ichnocarpus frutescens (L.) W.T.Aiton | Dudhilata | D, M | S | Fp, Rs | O | Fl. Aug-Dec Fr. U | M | GKR0058 |

(Table contd.)
| Scientific Name | Bangla name | District | Habit | Habitat | Occ. | FL/Fr. Time | Use | RSE |
|-----------------|-------------|----------|-------|---------|------|-------------|-----|-----|
| Nerium oleander L. | Korobi | G, T | S | Hy, Rs | O | Fl. Apr-Sep Fr. U | M | GKR1223 |
| Plumeria obtusa L. | Kathgolop | T | ST | Rs | O | Fl. & Fr. Throughout the year | Or | GKR1078 |
| Rauvolfia serpentina (L.) Benth. ex Kurz | Sarpagandha | D, M | H | Ah, Rs | E | Fl. Apr-Oct Fr. U | M | GKR1277 |
| Tabernaemontana coronaria (Jacq.) Willd. | Tagar | G, M, T | S | Fp, Rs | O | Fl. Apr-Sep Fr. U | Or | GKR1984 |
| T. dichotoma Roxb. ex Wall. | Kath Maloti | D, M | ST | Ah | O | Fl. Apr-Jul Fr. U | Or | GKR2077 |
| Thevetia peruviana (Pers.) K. Schum. | Kalkephul, Halde Korobi | T | ST | Rs | O | Fl. & Fr. Throughout the year | Or | GKR2223 |
| ASCLEPIADACEAE | | | | | | |
| Calotropis procera (Aiton) Dryand. | Akonda | D, G, M, T | S | Ah, Rs | C | Fl. Nov-Feb Fr. U | M | GKR0109 |
| Gongronema nepalense (Wall.) Decne. | Unknown | T | S | Fp, Rs | O | Fl. Jun-Jul Fr. U | W | GKR0278 |
| Marsdenia tenacissima (Roxb.) Moon | Chitti, Jitti, Siti | G | S | Rs | O | Fl. Aug-Dec Fr. U | M | GKR1987 |
| SOLANACEAE | | | | | | |
| Capsicum frutescens L. | Morich | M, T | H | Ah, Fp | O | Fl. & Fr. Throughout the year | S | GKR1905 |
| Datura metel L. | Kalo Datura | D, M, T | S | Fp, Rs | O | Fl. Mar-Dec Fr. U | M | GKR0223 |
| D. stramonium L. | Datura | D, M, T | S | Ah, Fp | Rs | Fl. Jul-Sep Fr. U | M | GKR0490 |
| Nicotiana plumbaginifolia Viv. | Bantamak | D, G, M, T | H | Ah, Fp | Rs | Fl. Mar-Aug Fr. U | We | GKR0002 |
| Physalis angulata L. | Unknown | M, T | H | Fp, Rs | O | Fl. Jul-Dec Fr. U | M | GKR0980 |
| P. minima L. | Tepari/Kapalp hutki | D, G, M, T | H | Ah, Fp | Rs | Fl. Nov-Feb Fr. U | M | GKR0458 |
| Solanum capsicoides All. | Tita Begun | G | S | Ah | O | Fl. Jun-Aug Fr. U | V | GKR0255 |
| S. melongena L. | Begun | D | H | Rs | O | Fl. Apr-Dec Fr. U | V | GKR1287 |
| S. nigrum L. | Titbegun | D, G, M, T | H | Ah, Fp, Rs | C | Fl. Dec-Mar Fr. U | W | GKR0435 |
| S. sisymbriifolium Lank. | Kanta Begun | G | H | Ah | O | Fl. May-Aug Fr. U | W | GKR0384 |
| S. surattense Burm. F. | Kantikari | D | H | Fp | O | Fl. Dec-Mar Fr. Jul-Sep | M | GKR0646 |
| S. torvum Sw. | Tit Begun | D, M, T | H | Ah, Fp, Rs | O | Fl. Feb-Apr Fr. Aug-Nov | W | GKR1265 |
| S. indicum L. | Phutki Begun | D | H | Fp, Rs | O | Fl. Feb-Apr Fr. Aug-Nov | M | GKR1663 |
| S. xanthocarpum Schrad. & H. Wendl. | Kantikari | D, G, M | H | Ep, Rs | O | Fl. Jun-Aug Fr. U | M | GKR0479 |

(Table contd.)
| Scientific Name | Bangla name | District | Habit | Habitat | Occ. | FL./Fr. Time | Use | RSE |
|----------------|-------------|----------|-------|---------|------|--------------|-----|-----|
| **CONVOLVULACEAE** | | | | | | | | |
| Anisea martinicensis (Jacq.) Choisy | Shadamati | M | H | Fp | CE | Fl. Sep-Nov Fr. U | W | GKR2578 |
| Argyreia capitiformis (Poir.) Ooststr. | Unknown | G, M | S | Ah, Fp | O | Fl. Sep-Dec Fr. U | M | GKR0365 |
| Cuscuta chinensis Lam. | China swarnalata | M | H | Fp, Rs | O | Fl. Nov-Mar Fr. U | M | GKR0198 |
| Cuscuta reflexa Roxb. | Swarnalata | G, M | H | Fp, Rs | O | Fl. & Fr. Dec-Feb Fr. U | M | GKR2533 |
| Evolvulus nummularius (L.) | Bhuikamri, Bhuokra | D, G, M, T | H | Ah, Fp, Rs | C | Fl. & Fr. Throughout the year | We | GKR0055 |
| Ipomoea alba L. | Moonflower | M, T | H | Rs | O | Fl. & Fr. Through out the year | W | GKR0904 |
| I. aquatica Forssk. | Panikalmi | D, G, M, T | H | Ah, Rs | C | Fl. Jun-Aug Fr. U | V | GKR0189 |
| I. batatas (L.) Lamk. | Misti Alu | G, M | H | Fp, Rs | O | Fl. May-Jul Fr. U | V | GKR0211 |
| I. mauritiana Jacq. | Bhumikumra | D, G | H | Ah | O | Fl. Aug-Sep Fr. U | M | GKR1256 |
| Operculina turpethum (L.) Silva Manso | Teorimul | D, M | H | Ah, Rs | O | Fl. Mar-Dec Fr. U | M | GKR0576 |
| Merremia emarginata (Burm. f.) Hallier f. | Indurkani | G | H | Fp, Rs | O | Fl. & Fr. Dec-Apr Fr. U | M | GKR0791 |
| M. hederacea (Burm. f.) Hallier f. | Sapussunda | D | H | Fp | O | Fl. Fr. Oct-Jan M | M | GKR1635 |
| **MENYANTHACEAE** | | | | | | | | |
| Nymphoides indica (L.) Kunze | Chandmala | M | H | Rs | O | Fl. Jul-Sep Fr. U Aq we | GKR1169 |
| **BORAGINACEAE** | | | | | | | | |
| Cordia dichotoma G.Forst. | Bowla | D, G, M, T | T | Ah, Ep, Fp | C | Fl. Mar - Apr, Fl. Jul - Aug Fr. U | M | GKR0176 |
| C. fragrantissima Kurz | Kaladuti | T | T | Fp | O | Fl. Feb-Mar Fr. U W | GKR1966 |
| Heliotropium indicum L. | Hatisur | D, G, M, T | H | Fp, Rs | C | Fl. Sep-Mar Fr. U M | GKR0454 |
| Tournefortia roxburghii C. B. Clarke | Shamshog | M | S | Rs | CE | Fl. Feb-Nov Fr. U W | GKR1176 |
| **VERBENACEAE** | | | | | | | | |
| Duranta repens L. | Golden dewberry | G | S | Ah, Fp | O | Fl. & Fr. Throughout the year M | GKR0345 |
| Lippia alba (Mill.) N.E.Br. ex Britton & P.Wilson | Motnoti, Motkhor | D, G, M | S | Ah, Fp, Rs | O | Fl. & Fr. Throughout the year W | GKR0090 |
| Phyla nodiflora (L.) Greene | Bhui Okar | D, M, T | H | Ah, Fp, Rs | O | Fl. Nov-Dec Fr. U M | GKR0559 |
| **LAMIACEAE** | | | | | | | | |
| Callicarpa arborea Roxb. | Bormala, Makanchi | D | T | Fp | O | Fl. May-Oct, Fl. Oct-Dec Fr. U | M | GKR1694 |
| Clerodendrum indicum (L.) Kunze | Bambunhati | D, M | S | Fp, Rs | O | Fl. Sep-Dec Fr. U M | GKR0465 |
| C. infortunatum L. | Bhant | M, T | S | Rs | O | Fl. Dec-Feb Fr. U M | GKR1828 |

(Table contd.)
| Scientific Name            | Bangla name | District | Habit | Habitat | Occ. | FL/FR. Time | Use | RSE  |
|---------------------------|-------------|----------|-------|---------|------|-------------|-----|------|
| Gmelina arborea Roxb.     | Gamar       | D, G, M  | T     | Fp, Rs  | O    | Fl. Feb-Apr Fr. May-Jun Fr. Sep-Jan Fr. U | T, Mi | GKR2977 |
| Hyptis capitata Jacq.     | Bilatitukma | M        | S     | Fp      | O    | Fl. Sep-Jan Fr. U | M | GKR0216 |
| H. suaveolens (L.) Poit.  | Tukma, Bilatti Tulas | D, M | H | Ah, Fp, Rs | O | Fl. Aug-Feb Fr. U | M | GKR0488 |
| Leonurus sibiricus L.     | Raktodrone  | D, G, M, T | H | Ah, Fp, Rs | C | Fl. Jul-Sep Fr. U | M | GKR0690 |
| Leucas aspera (Willd.) Link. | Dandakalos | D, G, M, T | H | Ah, Fp, Rs | C | Fl. Nov-Feb Fr. U | M | GKR0248 |
| L. indica (L.) Sm.        | Swetdron    | G, T     | H     | Ah, Fp, Rs | O | Fl. Mar-Jul Fr. U | M | GKR0407 |
| L. vestita Benth.         | Tita don    | D        | H     | Fp      | O    | Fl. Nov-Feb Fr. U | M | GKR1370 |
| Mentha piperita L.        | Pudina, Mentha | D, M, T | H | Ah | O | Fl. Apr-Jan Fr. U | M | GKR2393 |
| Ocimum americanum L.      | Kalo-tulashi | D, G, T | H | Ah, Fp | O | Fl. & Fr. Throughout the year | M | GKR1614 |
| O. gratissimum L.         | Ram tulsi   | D, M, T  | H     | Ah, Fp | O    | Fl. Aug-Dec Fr. U | M | GKR1260 |
| O. sanctum L.             | Krishnatuli | D, M, T  | H     | Ah, Fp | O    | Fl. Sep-Mar Fr. U | M | GKR0613 |
| Pogostemon crassicaulis (Benth.) Press | Jui-lata | T        | H     | Fp | O | Fl. Sep-Dec Fr. U | M | GKR2171 |
| Tectona grandis (L.f.)    | Segun       | D, G, M, T | T | Fp, Rs | C | Fl. Aug-Sep Fr. U | T | GKR1281 |
| Teucrium viscidum Blume   | Unknown     | M, T     | H     | Ah, Fp | O    | Fl. Jun-Nov Fr. U | W | GKR1060 |
| Vitex negundo L.          | Nishinda    | D, G, M, T | S | Ah | C | Fl. Feb-Jul Fr. U | M | GKR0077 |
| V. peduncularis Wall. ex  | Boruna, Horina | G        | ST | Ah | O | Fl. Feb-Apr Fr. U | M | GKR0354 |
| Schauer                   |             |          |       |        |      |             |     |      |
| HYDROCHARITACEAE          |             |          |       |        |      |             |     |      |
| Hydrocle zeylanica (L.)   | Kaschera, Bishlanguli | T        | H | Ah, Fp | O | Fl. Nov-Dec Fr. U | We | GKR2203 |
| Vahl                      |             |          |       |        |      |             |     |      |
| Ottelia alismoides (L.) Pers. | Panikola  | D        | H     | Fp, Rs | O | Fl. Aug-Oct Fr. U | Aq we | GKR1625 |
| Vallisneria spiralis L.   | Patajhanji  | D, M     | H     | Fp | O | Fl. Jun-Oct Fr. U | Aq we | GKR0150 |
| PLANTAGINACEAE            |             |          |       |        |      |             |     |      |
| Emilia sonchifolia (L.) ex DC. | Sadimodi | M        | H     | Rs | O | Fl. Jul-Dec Fr. U | M | GKR0209 |
| Limnophila aromatica (Lam.) Merr. | Belem   | M        | H     | Rs | O | Fl. Jun-Aug Fr. U | Or | GKR0249 |
| Mecardonia procumbens (Mill.) Small | Garurbramhi | D, M, T | H | Ah, Fp, Rs | O | Fl. Jun-Sep Fr. U | We | GKR0075 |
| OLEACEAE                  |             |          |       |        |      |             |     |      |
| Jasminum officinale L.    | Jui         | M        | S     | Ah | O | Fl. May-Sep Fr. U | Or | GKR0385 |

(Table contd.)
| Scientific Name | Bangla name | District | Habit | Habitat | Occ. | FL./Fr. Time | Use | RSE |
|----------------|-------------|----------|-------|---------|------|--------------|-----|-----|
| *J. scandens* (Retz.) Vahl | Paharijui | G, M | S | Ah, Fp | O | Fl. Jun-Aug | W | GKR0185 |
| *Nyctanthes arbor-tristis* L. | Shefali, Shiuli | D, G, M | T | Ah, Fp | O | Fl. Sep-Oct | D | GKR0480 |
| **SCROPHULARIACEAE** | | | | | | | | |
| *Lindenbergia indica* Vatke | Basanti | M | H | Ah | O | Fl. Oct-Jan | M | GKR0179 |
| *Lindernia anagallis* (Burm.f.) Pennell | Panighas | D, G, T | H | Ah, Fp, Rs | O | Fl. Jul-Dec | We | GKR0426 |
| *L. antipoda* (L.) Alston | Sada panighas | M | H | Ah, Fp, Rs | O | Fl. Aug-Oct | We | GKR0057 |
| *L. crustacea* (L.) F. Muell. | Chapraghash | G, T | H | Ah, Fp, Rs | O | Fl. Jul-Aug | We | GKR0751 |
| *L. elata* (Benth.) Wettst. | Unknown | M, T | H | Fp | O | Fl. Jul-Oct | We | GKR0148 |
| *L. hyssopioides* (L.) Haines | Unknown | G, T | H | Ah | O | Fl. Mar-Sep | We | GKR0235 |
| *L. parviflora* (Roxb.) Haines | Unknown | D | H | Fp | O | Fl. Aug-Dec | We | GKR0623 |
| *L. rotundifolia* (L.) Alston | Unknown | T | H | Ah, Fp, Rs | O | Fl. Aug-Nov | We | GKR0978 |
| *Mazus rugosus* Lour. | Unknown | M, T | H | Ah, Fp, Rs | O | Fl. Aug-Dec | We | GKR1766 |
| *Scoparia dulcis* L. | Jangli-dhone, Misridana | D, G, M, T | H | Ah, Fp, Rs | O | Fl. & Fr. Throughout the year | M | GKR0274 |
| **ACANTHACEAE** | | | | | | | | |
| *Andrographis paniculata* (Burm.f.) Nees. | Kalomegh, Mohateeta | D, G, M | H | Ah, Fp, Rs | O | Fl. Mar-Dec | M | GKR0074 |
| *Dipteracanthus patulus* (Jacq.) Nees | Spreading Ruellia | G | H | Rs | O | Fl. & Fr. Oct-Feb | We | GKR2038 |
| *D. prostratus* (Poir.) Nees | Unknown | D, G | H | Ah, Fp, Rs | O | Fl. & Fr. Oct-Apr | We | GKR2038 |
| *Ecbolium ligustrinum* (Vahl) Vollesen | Green Shrimp Plant | M | H | Fp, Rs | O | Fl. Jan-May | M | GKR2138 |
| *Hemigraphis hirta* (Vahl.) T.Anderson | Buripana, Boratigas | D, G, M, T | H | Ah, Fp, Rs | C | Fl. Jan-May | W | GKR0013 |
| *Hygrophila polysperma* (Roxb.) T. Anders. | Murmuri | D, G, M, T | H | Fp, Rs | C | Fl. Oct-Mar | Or | GKR1332 |
| *H. phlomoides* Nees | Filama | G | H | Ah | O | Fl. Apr-Aug | We | GKR2022 |
| *H. schulli* (Buch.-Ham.) M. R. & S. N. | Kulekara | G | H | Rs | O | Fl. Sep-Apr | M | GKR0247 |
| *H. difformis* (L.f.) Blume | Jaljanti | G | H | Ah | O | Fl. Aug-Mar | We | GKR2005 |
| *Justicia adhatoda* L. | Bashok | D, G, M | S | Ah, Fp, Rs | O | Fl. & Fr. Dec-Jun | M | GKR0737 |
| *J. gendarussa* Burm.f. | Jagotmadan, Nihishtinda | D, G, M, T | S | Ah, Fp, Rs | C | Fl. Jan-Apr | M | GKR0311 |

(Table contd.)
| Scientific Name | Bangla name | District | Habit | Habitat | Occ. | FL/Fr. Time | Use | RSE |
|----------------|-------------|----------|-------|---------|------|-------------|-----|-----|
| Nelsonia canescens (Lam.) Spreng. | paramul | G | H | Ah, Fp, Rs | O | Fl. Jan-Mar | M | GKR0236 |
| Phlogacanthus curviflorus (Wall.) Nees | Tamrupuspi Basok | M | S | Fp, C | O | Fl. Oct-Feb | M | GKR0053 |
| Ruellia tuberosa L. | Patpati | D, G, M, T | H | Ah, Fp, Rs | C | Fl. & Fr. Throughout the year | We | GKR0466 |
| Rungia pectinata (L.) Nees | Pindi | D, G, M, T | H | Ah, Fp, Rs | C | Fl. Nov-Feb | We | GKR0035 |
| **PEDALIACEAE** | | | | | | | | |
| Sesamum indicum L. | Til | D | H | Ah, Fp, Rs | O | Fl. Jun-Jul | O | GKR1411 |
| **BIGNONIACEAE** | | | | | | | | |
| Oroxylum indicum (L.) Kurz | Sona, Kanaidinga, Hoimonti | D, M, T | T | Ah, Fp, Rs | O | Fl. Jul-Dec | Fw, M | GKR1257 |
| Tecoma gaudichaudii DC. | Chandaprabha | M, T | S | Rs, O | O | Fl. Feb-Apr | Or | GKR2105 |
| T. stans (L.) Juss. ex Kunth | Chandaprabha | M | S | Rs, O | O | Fl. Dec-Feb | Or | GKR2093 |
| **RUBIACEAE** | | | | | | | | |
| Dentella repens (L.) J. R. & G. Forst. | Bhuipat | D, T | H | Ah, Fp, C | O | Fl. Mar-Apr | We | GKR0481 |
| Gardenia jasminoides J.Ellis | Gandharaj | D, G, M, T | S | Ah, C | O | Fl. Apr-Aug | Or | GKR1011 |
| Hedyotis axillaris Gardner ex Thwaites | Unknown | D, T | H | Ah, Fp, O | O | Fl. Jul-Oct | We | GKR0170 |
| H. racemosa Lam. | Unknown | M | H | Ah, Fp, O | O | Fl. Jan-Sep | We | GKR0071 |
| H. hermanniana R.M.Dutta | Unknown | M | H | Ah, Rs, O | O | Fl. Jun-Sep | We | GKR0020 |
| **ISOPHYLLACEAE** | | | | | | | | |
| Ixora coccinea L. | Rangoon | G, M, T | S | Fp, Rs, O | | Fl. & Fr. Throughout the year | M, Or | GKR0464 |
| Meyna pubescens (Kurtz) Robyns | Mainphal | M, T | S | Fp, Rs, O | | Fl. Mar-Apr | W | GKR2140 |
| Neolamarckia cadamba (Roxb.) Bosser | Kadam | D, G, M, T | T | Fp, Rs, C | | Fl. Apr-Aug | O, Pi | GKR1209 |
| Oldenlandia corymbosa L. | Khetpapa | D, G, M, T | H | Ah, Fp, Rs, C | | Fl. Jul-Aug | We | GKR0471 |
| O. diffusa (Willd.) Roxb. | Pitpapa | D, G, T | H | Ah, Fp, Rs, O | | Fl. Aug-Nov | We | GKR0862 |
| O. biflora L. | Damanpapa | M, T | H | Ah, Fp, Rs | O | Fl. & Fr. Throughout the year | We | GKR0500 |
| Ophiocarya harrissiana var. rugosa (Wall.) Hook. f. | Jari Ful, Kalamahoma | D, T | H | Rs, O | | Fl. Jun-Aug | M | GKR0665 |
| Paederia foetida L. | Gandhyabhadu | M | H | Rs, O | | Fl. Jun-Aug | M | GKR2018 |
| Pavetta indica L. | Kukurchara/Ju | M, T | S | Ah, Rs, O | | Fl. Apr-Jul | Or | GKR2915 |
| Psilanthus bengalensis (Roxb.) Leroy | Ban Coffe | D, G, T | S | Rs, O | | Fl. Feb-May | M | GKR0333 |

(Table contd.)
| Scientific Name | Bangla name | District | Habitat | Occ. | FL/Fr. Time | Use | RSE |
|----------------|------------|---------|---------|------|-------------|-----|-----|
| *Richardia scabra* L. | Taraphul | D, M | H | Ah, Fp, Rs | O | Fl. Nov-Feb Fr. U | We | GKR0056 |
| *Spermacoce articulata* L. f. | Bhagajongla | G | H | Ah, Fp | O | Fl. Oct-Dec Fr. U | M | GKR0357 |
| *S. exilis* (L.O.Williams) C.D.Adams ex W.C.Burger & C.M.Taylor | Unknown | G | H | Ah, Fp | O | Fl. Sep-Oct Fr. U | W | GKR0836 |
| *S. latifolia* Aubl. | Ghuijil | D, G | H | Ah, Fp, Rs | O | Fl. Aug-Oct Fr. U | W | GKR0840 |

**ASTERACEAE**

| Scientific Name | Bangla name | District | Habit | Occ. | FL/Fr. Time | Use | RSE |
|----------------|------------|---------|---------|------|-------------|-----|-----|
| *Acmella radicans* (Jacq.) R.K.Jansen | Surjakonnya | G, M | H | Ah, Fp, Rs | O | Fl. Sep-Jan Fr. U | M | GKR1093 |
| *Ageratum conyzoides* L. | Phulkuri | D, G, M, T | H | Ah, Fp, Rs | O | Fl. & Fr. Throughout the year | M | GKR0165 |
| *Blumea lacera* (Burm.f.) DC. | Shealmatra, Shealmoti | D, G, M | H | Ah, Fp, Rs | O | Fl. & Fr. Throughout the year | M | GKR0063 |
| *Caesalia axillaris* Roxb. | Fuitaghas | D, M, T | H | Ah, Fp, Rs | O | Fl. Sep-Oct Fr. U | We | GKR0196 |
| *Chromolaena odorata* (L.) R.M.King & H.Rob. | Assamlata | D | S | Ah, Fp | O | Fl. Nov-May Fr. U | M | GKR0673 |
| *Eclipta alba* (L.) Hassk. | Kalokeshi, Kesaraj | D, G, M, T | H | Ah, Fp, Rs | O | Fl. Aug-Sep Fr. Oct-Dec | M | GKR0459 |
| *Elephantopus scaber* L. | Hastipadi | D, G, H | Fp, Rs | O | Fl. Oct-Jan Fr. U | M | GKR0244 |
| *Gnaphalium luteo-album* L. | Bara Kamra | G | H | Rs | O | Fl. Jun-Aug Fr. U | We | GKR0427 |
| *G. pensylvanicum* Willd. | Silvalomi | M | H | Rs | O | Fl. Dec-Jul Fr. U | We | GKR0101 |
| *Grangea maderaspatana* (L.) Poir. | Nimuti | D, G, M | H | Ah, Fp, Rs | O | Fl. Jan-Aug Fr. U | We | GKR0157 |
| *Gynura procumbens* (Lour.) Merr. | Diabetes plant | M | H | Ah | O | Fl. Mar-Apr Fr. U | M | GKR1957 |
| *Mikania cordata* (Burm. f.) B.L.Rob. | Assam lata | D, G, M, T | H | Ah, Fp, Rs | O | Fl. & Fr. Throughout the year | M | GKR0434 |
| *M. scandens* (L.) Willd. | climbing hemp | G, M | H | Ah | O | Fl. Jun-Aug Fr. U | P, Or | GKR0399 |
| *Parthenium hysterophorus* L. | Bish gach | M | H | Rs | O | Fl. & Fr. Throughout the year | We | GKR0231 |
| *Pseudelephantopus spicatus* (B.Juss. ex Aubl.) Rohr ex C.F.Baker | Dog's-tongue | G, M, T | H | Ah, Fp, Rs | O | Fl. Oct-Dec Fr. U | We | GKR0103 |
| *Sonchus arvensis* L. | Dhudia | M | H | Ah, Fp | O | Fl. Jul-Oct Fr. U | W | GKR1128 |
| *Spilanthes calva* DC. | Marhatitiga | D, M, T | H | Ah, Fp, Rs | O | Fl. Feb-Apr Fr. U | M | GKR0065 |
| *S. acmella* (L.) L. | Surjakonnya | D, G, M, T | H | Ah, Fp, Rs | O | Fl. & Fr. Throughout the year | We | GKR0474 |

(Table contd.)
were dominated by the herbs (238 species; 52.31%) followed by trees (129 species; 28.35%) and shrubs (88 species; 19.34%). Among these species, 47 were climbers, six vines and four parasites. These data indicate that the homestead areas of central region of Bangladesh still harbour a large number of dicot species and they can serve as the hotspots of the flora and biodiversity of Bangladesh.

The taxonomic enumeration of the species of dicotyledons in the homestead areas of the four districts reported by this study seems lower than the record (605 species) of Tabassum (2015). This is due to the reason that Tabassum (2015) studied this plant group of whole Gazipur district consists of homestead and different non-homestead areas, the total land area of this district is much higher than that of the 1120 homesteads of four districts under this study, and in these homesteads, a good number of the species were overlapping and common. Most of other relevant studies conducted in plain land areas of this country mention the taxonomic account of Angiosperm species instead of dicot species. The enumeration of Angiosperm species by few of these studies (Kabir and Webb, 2009) are relatively higher, whereas, that of few other studies (Begum et al., 2013; Islam et al., 2013; Muhammed et al., 2011, 2013; Rahman et al., 2009) are relatively lower than that of the dicot species by this study.

In the homesteads of the study area, Fabaceae with 41 species of 28 genera was recognized as the largest family that was followed by Euphorbiaceae with 34 species under 19 genera and Asteraceae with 26 species belonging to 22 genera. Solanum L. and Lindernia All. with eight species each was found as the largest genus in the study area, which was followed by Ficus L and Euphorbia L. with seven species each, Persicaria Mill. with six species and Albizia Durazz., Diospyros L. and Piper L. with five species each.

The composition and distribution of dicot species in the homestead areas of the four districts were remarkably variable. In the homesteads of Dhaka, Gazipur, Manikganj and Tangail districts, the occurrence of total 283, 243, 285 and 223 species, respectively, was confirmed. Among these species, a total of 52, 35, 53 and 20 species were found to occur exclusively in the homesteads of

| Scientific Name | Bangla name | District | Habit | Habitat | Occ. | FL./Fr. Time | Use | RSE |
|-----------------|-------------|----------|-------|---------|------|--------------|-----|-----|
| Tagetes erecta L. | Ganda | D, M | H | Fp | O | Fl. Nov-Mar Fr. U | Or | GKR1890 |
| Tridax procumbens (L.) L. | Tridhara | D, G, T | H | Ah, Fp | O | Fl. & Fr. Through-out the year | We | GKR0484 |
| Vernonia cinerea (L.) Less. | Kukurshunga | D, G, M, T | H | Ah, Fp | C | Fl. & Fr. Through-out the year | We | GKR0064 |
| Wedelia biflora (L.) DC. | Beach Sunflower | D | H | Fp | O | Fl. & Fr. Through-out the year | Or | GKR0666 |
| W. chinensis (Osbeck) Merr. | Mahavringaraj | D | H | Fp, Rs | O | Fl. & Fr. Through-out the year | Or | GKR0654 |
| Xanthium indicum Koen. ex Roxb. | Ghagra, Banokra | D, G, M | H | Fp, Rs | O | Fl. Mar-Dec Fr. U | M | GKR0517 |
| Youngia japonica (L.) DC. | Unknown | M, T | H | Fp, Rs | O | Fl. Feb-Dec Fr. U | Or | GKR0195 |

Legend: **District**: D = Dhaka, G = Gazipur, M = Manikganj, T = Tangail; **Habit**: H = Herb, S = Shrub, T = Tree; **Habitat**: Rs = Road side, Ah = Adjoining open area except house yard, Bb = Bamboo bush, Hy = House yard, Ep = Edge of the pond, Fp = Fallow place; **Occ.**: (= Occurrence): C = Common, CE = Critically Endangered, E = Endangered, O = Occasional, R = Rare, V = Vulnerable; **FL./Fr. Time**: Fl. = Flowering time, Fr. = Fruiting time, U = Unknown; **Use**: Bb = Boatbuilding, C = Cereals, Ch = Chutney, Cw = Cabinet work, D = Dye, Fb = Fiber, Fr. = Fruit, Fw = Fuel wood, R = Rubber, Re = Resin, Rp = Rice pounders, T = Timber, W = Wild, We = Weed, M = Medicinal, Mi = Musical instrument, Aq we = Aquatic weed, P = Poisonous, Pi = Perfume industry, S = Spice, O = Oil, Or = Ornamental, Fd = Fodder, H = Hedge, V = Vegetable, Wo-Wood; **RSE** = Representative Specimens Examined (All housed in JUH).
Dhaka, Gazipur, Manikganj and Tangail, respectively. Whereas, total 231, 208, 231 and 203 species, respectively of Dhaka, Gazipur, Manikganj and Tangail districts, were recorded as overlapping in the remaining three districts. Only 110 species were commonly found in the homesteads of four districts.

The similarity between and among the four districts in species composition of their homesteads measured by Jaccard coefficient shows that (Fig. 2), it is more than 60% in between any two of these districts, whereas, it is only 41% if all of the four districts are considered. The highest similarity in species composition (72%) was found in between Gazipur and Tangail districts, and the lowest (63%) in Dhaka and Manikganj districts.

The study has recognized a total of 332 species from the homesteads of the study area of central Bangladesh as economically useful. The major categories of these economically useful species were medicinal (184 species), timber (34 species), fruit (38 species), ornamental (36 species), vegetable (30 species), fuel wood (26 species), oil (14 species), spice (five species) and fiber (eight species). Among the economically useful species of the study area, total 53 species were useful in two and seven species in three economic categories.

Among these, at least 96 tree species (e.g. Albizia lebbeck, Alstonia scholaris, Aphanamixis polystachya, Barringtonia acutangula, Bombax ceiba, Lagerstroemia speciosa, Lannea coromandelica, Millusa velutina, Polyalthia longifolia, Syzygium cumini, Tamarindus indica, Tectona grandis, and Trema orientalis), used as wood or timber, are now native to Bangladesh. Moreover, a good number of medicinal (e.g. Abroma augusta, Azadirachta indica, Cinnamomum tamala, C. zeylanicum, Ficus racemosa, F. religiosa, Holarrhena antidysenterica, Moringa oleifera, Ocimum sanctum, Ricinus communis, Terminalia arjuna, T. belerica, T. chebula, Tiliacia acuminata, Tinospora crispa, Vitex negundo, and Zanthoxylum rhetsa) and fruit yielding (e.g. Aegle marmelos, Amona reticulata, A. squamosa, Artocarpus heterophyllus, Averrhoa carambola, Baccaraea motleyana, Carica papaya, Citrus grandis, C. limon, Dillenia indica, Diospyros peregrina, Flacourtia jangomas, Mangifera indica, Manilkara zapota, Elaeocarpus floribundus, Phyllanthus acidus, P. reticulatus, Psidium guajava, Punica granatum, Syzygium cumini, and Tamarindus indica) species, harboured in the homesteads of the study area, are also
native to Bangladesh. The occurrence of a good number of timber and fruit species in the homestead areas of the study area is supported by Bashar (1999). But in contrast, the population of about 28% of the native tree species (e.g. Holarrhena antidysenterica, Terminalia belerica, T. arjuna, Diospyros montana, Pithecellobium dulce, Macaranga indica, Mallotus philippensis, Elaeocarpus tecktorius, Piper peplloides, Tabernaemontana dichotoma, Miliusa velutina, Diospyros peregina) were found to be declining in the homestead areas of the four districts.

This study has provided field data on the current status of seven threatened species, included in the Red Data Book of Vascular Plants of Bangladesh (Khan et al., 2001; Ara et al., 2013), in the study area (Table 2). The existing population size, number of localities, and estimated Extent of Occurrence (EOO) and Area of Occupancy (AOO) of these species were very narrow (Table 2). Moreover, all of these species were observed with poor regeneration and their localities were under the threats of continuous habitat destruction. Based on these facts, Abroma augusta (L.) L.f., Aniseia martinicensis (Jacq.) Choisy, Pterocarpus santalinus L.f. and Tournefortia roxburghii C.B. Clarke have been estimated as Critically Endangered (CE), Mucuna bracteata DC. ex Kurz and Rauvolfia serpenntina (L.) Benth. ex Kurz as Endangered (E), and Andrographis paniculata (Burm.f.) Nees. as Vulnerable (V) in the homestead areas of Dhaka, Gazipur, Manikganj and Tangail districts.

Table 2. Estimated threatened status of seven dicot species included in Red Data Book Bangladesh in the homestead areas of Dhaka, Gazipur, Manikganj and Tangail districts.

| Species name              | Total no. of individuals | No. of locality | District                  | EOO (km²) | AOO (km²) | Estimated threatened category |
|---------------------------|--------------------------|-----------------|---------------------------|-----------|-----------|-------------------------------|
| Abroma augusta            | 04                       | 01              | Tangail                   | 28        | 08        | Critically endangered         |
| Andrographis paniculata   | 450                      | 07              | Dhaka, Gazipur and Manikganj | 1040      | 35        | Vulnerable                    |
| Aniseia martinicensis     | 05                       | 01              | Manikganj                 | 35        | 09        | Critically endangered         |
| Mucuna bracteata          | 45                       | 02              | Dhaka                     | 38        | 20        | Endangered                    |
| Pterocarpus santalinus    | 01                       | 01              | Manikganj                 | 24        | 06        | Critically endangered         |
| Rauvolfia serpentina      | 144                      | 02              | Dhaka and Manikganj       | 270       | 10        | Endangered                    |
| Tournefortia roxburghii   | 01                       | 01              | Manikganj                 | 24        | 06        | Critically endangered         |

This study provides basic taxonomic information on all species of dicotyledones including seven threatened species currently occurring in the homestead area of central region of Bangladesh, which might serve as an important baseline to track the trend of changes in the floristic composition and biodiversity conservation in the homestead areas in course of time and different biogeographical processes. The data provided by this study might be useful in planning, management, conservation and sustainable development of homestead plant genetic resources in Bangladesh.

The increased human population and associated development activities in the last few decades has resulted directly in depletion of natural vegetation, which in turn increase the pressure on the homestead forest especially in the developing countries to meet various needs of the human beings (Alam et. al., 2005). This observation is found to be true in the homestead areas of the four
districts studied. Additionally, habitat fragmentation and depletion, intrusion of exotic (e.g. *Parthenium hysterophorus, Mikania cordata, Chromolaena odorata, Acacia auriculiformis* and *Eucalyptus camaldulensis*) and parasitic species (e.g. *Cuscuta reflexa, Dendrophthoe falcata, and Helixanthera cylindrica*), vegetation clearing, unnecessary firing, unplanned agricultural extension, over exploitation of natural resources, lack of awareness in the local people including the homestead owners, and lack of proper management and protection systems homestead forests etc. are also the functional threats to the homestead flora, especially the threatened and declining native plant species, of the study area.

Therefore, appropriate planning, management strategies and measures, and awareness building programs should be effectively launched for the conservation of plant genetic resources in the homestead areas of this region. Performing studies on the natural regeneration, biogeography, and pollination, breeding and dispersal mechanisms of the threatened species threatened and declining native species of the region are very crucial for their sustainable conservation. Besides, effective attempts including the provision of incentives for involving the local people in conservation programs in the region is highly recommended.

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