

**VASCULAR FLORA OF THE KARNAFULI RIVER AND ITS SURROUNDING
AREAS UNDER RANGAMATI DISTRICT OF BANGLADESH.
II. PTERIDOPHYTE, GYMNOSPERM AND LILIOPSIDA (MONOCOTS)**

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Abstract

A systematic floristic study of Pteridophytes, Gymnosperms and Liliopsida (monocots) of the Karnafuli River and its surrounding areas under Rangamati district of Bangladesh has been made. A total of 128 species belong to 97 genera under 38 families are recognized. Whereas, Liliopsida represented by 105 species under 77 genera and 21 families; Gymnosperms represented by 2 species under 2 genera and 2 families; and Pteridophytes by 21 species under 18 genera and 15 families. The tribal people of the area uses 39 plant species for their primary health care. Updated nomenclature with full reference citation, well known synonym, local name (in available case), habit, flowering and fruting time, use (in available case), state of occurrence and specimen examined have been provided for each species.

Introduction

The under explored river bank areas of the Karnafuli river and its surrounding areas are situated in Barkal, Rangamati sadar and Kaptai upazila under Rangamati district. The areas lie between 22°26' and 22°38' North and 92°08' and 92°17' East. Very recently Islam *et al.* (2016a) have described 449 species under Magnoliopsida (Dicotyledons) from the same study areas for the first time. The present paper is the continuation of the previous one. The present study has been undertaken in order to identify the species under Pteridophytes, Gymnosperms and Liliopsida (Monocots). The detailed information about the study areas has been provided in Islam *et al.* (2016a).

Over the last few decades several attempts have been made on the floristic studies under Pteridophytes and Liliopsida (Monocots) in Bangladesh, particularly in the forest and protected areas by Khan and Banu (1969), Tutul *et al.* (2009), Haque *et al.* (2016), Uddin *et al.* (2012a, 2012b), Uddin and Pasha (2002), Uddin and Pasha (2007), Islam *et al.* (2016b), Pasha and Mallick (1980), Mirza and Rahman (1997), Prain (1903), Uddin and Pasha (1997) and Hossain *et al.* (2015). But, In Bangladesh, rivers and its surrounding areas wise Pteridophytes, Gymnosperms and Liliopsida (Monocots) flora study attempt has been done yet. However, no published floristic account has been prepared under Pteridophytes, Gymnosperms and Liliopsida (Monocots) from the Karnafuli river and its surrounding areas so far. Though the study area is very rich in species diversity but a comprehensive floristic study of the area is still lacking. So, the present study has been under taken. The main objectives of the present study are to explore, identify, findout the potential values and document the Pteridophytes, Gymnosperms and Liliopsida (Monocots) of the Karnafuli river and its surrounding areas.

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Materials and Methods

Materials and methods of the work carried out were also provided in the previous paper in Islam *et al.* (2016a). The specimens were collected from river bank, hill slopes, hill tops, swamps, forest floors, forest margins, plain lands and streams of the selected areas that are mentioned in the previous paper. Collected plant specimens were identified and identification were confirmed with the help of Hooker (1888-1897), Huq (1986), Prain (1903), Siddiqui *et al.* (2007a, 2007b), Ahmed *et al.* (2008). The current nomenclatural information of each species was incorporated as per ICBN by consulting with Index Kewensis; recent taxonomic publications *viz.*, IPNI (2008), WFO (2013), TROPICOS (2010) and Pasha & Uddin (2013). Local names of many plants have been collected from local people during field trips and by consulting literature, *viz.* Huq (1986), Pasha and Uddin (2013), Ahmed *et al.* (2008), Siddiqui *et al.* (2007a, 2007b). Ethnobotanical information of some medicinal valuable plant species for these study area also collected from the local people and consulting literature, *viz.* Ahmed *et al.* (2008), Siddiqui *et al.* (2007a, 2007b). The plant families of Pteridophytes and Gymnosperms are arranged according to the classification of Kramer & Green (1990), on the other hand the families of Liliopsida (Monocots) are arranged according to the Cronquist's (1981) system of flowering plant classification. Pteridophytes, Gymnosperms and Liliopsida (Monocots) have been placed respectively. The genera and species under each family have been arranged alphabetically. Valid name with original citation of each species with only well-known synonym in few cases, local name, use(s), habit, state of occurrence and only one specimen examined number has been provided. The collected specimens have been preserved at the Bangladesh National Herbarium (DACB).

Result

The present vascular flora diversity inventory has identified following Pteridophytes, Gymnosperms and Liliopsida (Monocots) from the Karnafuli river and its surrounding areas.

PTERIDOPHYTES

Selaginellaceae Willk.

Selaginella repanda (Desv. *ex* Poir.) Spring. Voy. Bonite Bot. 1: 329. 1846. *Lycopodium repandum* Desv. *ex* Poir., Encycl. Suppl. 3: 558. 1814. *Habit*: Terrestrial herb. *Local name*: Chikon pata fern. *Use*: Ornamental. *State of occurrence*: Rare. *Specimen examined*: KKI1791 (DACB).

Equisetaceae L.C. Richard

Equisetum ramosissimum ssp. **debile** (Roxb. & Vauch.) Hauke, Amer. Fern. 52: 53. 1962. *Equisetum debile* Roxb. *ex* Vouch., Mem. Soc. Phy. Geneve 1: 387. 1822. *Habit*: Terrestrial herb. *Local name*: Ghorar lenja. *Use*: Medicine. *State of occurrence*: Common. *Specimen examined*: KKI1799 (DACB).

Aspleniaceae Frank

Asplenium unilaterale Lam., Encycl. 3: 305. 1786. *Asplenium resectum* Sw., Icon. Pl. 3: 72. 1791. *Habit*: Terrestrial herb. *State of occurrence*: Rare. *Specimen examined*: KKI1784 (DACB).

Azollaceae Wettstein

Azolla pinnata R.Br., Prodr. Fl. Nov. Holt.: 167. 1870. *Salvinia imbricata* Roxb. *ex* Griff., Calcutta J. Nat. Hist. 4: 469. 1899. *Habit*: Aquatic, free floating herb. *Local name*: Azolla. *Use*: Green manure. *State of occurrence*: Rare. *Specimen examined*: KKI2097 (DACB).

Blechnaceae (Presl) Copel.

Blechnum orientale L., Sp. Pl. 2: 1077. 1753. *Habit*: Terrestrial herb. *Local name*: Lal fita. *Use*: Medicine. *State of occurrence*: Common. *Specimen examined*: KKI 1779 (DACB).

Cyatheaceae Kaulf.

Cyathea gigantea (Wall. ex Hook.) Holttum, Gard. Bull. Straits Settlem. 8: 318. 1935. *Alsophila gigantea* Hook. & Bak., Syn. fil. 43. 1866. *Habit*: Tree. *Local name*: Gach Dhekia. *Use*: Medicine. *State of occurrence*: Common. *Specimen examined*: KKI1816 (DACB).

Dryopteridaceae Ching

Diplazium esculentum (Retz.) Sw., J. Bot. (Schrader) 1801(2): 312. 1803. *Anisogonium esculentum* (Retz.) Presl, Tent. Pterid. 116. 1836. *Habit*: Terrestrial herb. *Local name*: Dheki shak, Babu shak. *Use*: Vegetable. *State of occurrence*: Common. *Specimen examined*: KKI1843 (DACB).

Tectaria paradoxa (Fee) Sledge, Kew Bull. 27(3): 413. 1972. *Aspidium paradoxum* Fée, Mém. Foug. 5: 293. 1852. *Habit*: Terrestrial herb. *Local name*: Jungli Dhekia. *State of occurrence*: Rare. *Specimen examined*: KKI1860 (DACB).

Lomariopsidaceae Alston

Bolbitis appendiculata (Willd.) Iwatsuki., Acta Phytotax. Geobot. 18: 48. 1959. *Acrostichum appendiculatum* Willd., Sp. Pl. 5: 114. 1810. *Habit*: Terrestrial herb. *Local name*: Dhekia. *State of occurrence*: Rare. *Specimen examined*: KKI1888 (DACB).

Marattiaceae Bercht. & Presl

Angiopteris evecta (Forst) Hoffm., Comm. Soc. Reg. Sci. Gott. 12: 29. 1796. *Polypodium evectum* Forst 1786. *Habit*: Terrestrial fern. *Local name*: Raj Dhekia. *Use*: Medicine. *State of occurrence*: Common. Representative specimen: KKI1866 (DACB).

Angiopteris wallichiana C. Presl, Suppl. Tent. Pterid. 22.1845. *Habit*: Terrestrial fern. *Local name*: Raj Dhekia. *Use*: Medicine. *State of occurrence*: Rare. *Specimen examined*: KKI1864 (DACB).

Marsileaceae Mirbel

Marsilea quadrifolia L., Sp. Pl. 2: 1099.1753. *Habit*: Marshland herb. *Local name*: Tetulia pata. *Use*: Medicine. *State of occurrence*: Common. *Specimen examined*: KKI1901 (DACB).

Polypodiaceae Berchtold & Presl

Microsorium pteropus (Blume) Copel., Uni. Calif. Pub. Bot. 16: 112. 1929. *Polypodium pteropus* Blume, Enum. Pl. Javae 3: 125. 1828. *Habit*: Epiphytic fern. *Local name*: Pankhiraj. *Use*: Medicine. *State of occurrence*: Rare. *Specimen examined*: KKI1921 (DACB).

Pteridaceae Reichb.

Adiantum philippense L., Sp. Pl. 2: 1094. 1753. *Habit*: Terrestrial fern. *Local name*: Kali-jhant. *Use*: Ornamental. *State of occurrence*: Common. *Specimen examined*: KKI1907 (DACB).

Doryopteris ludens (Wall. ex Hook.) J.Sm., Hist. Fil. 189. 1875. *Pteris ludens* Wall. ex Hook., Sp. Fil. 2: 210. 1858. *Habit*: Terrestrial, creeping fern. *Local name*: Talpakha fern. *Use*: Ornamental. *State of occurrence*: Rare. *Specimen examined*: KKI1916 (DACB).

Pityrogramma calomelanos (L.) Link, Handb. 3: 20. 1833. *Acrostichum calomelanos* L., Sp. Pl. 2: 1072. 1783. *Habit*: Terrestrial fern. *Local name*: Rupali Dhekia. *Use*: Ornamental. *State of occurrence*: Rare. *Specimen examined*: KKI1931 (DACB).

Salviniaceae Dumort.

Salvinia adnata Desv., Mém. Soc. Linn. Paris 6: 177. 1827. *Salvinia molesta* D.S. Mitch., Brit. Fern Gaz. 10(5): 251. 1972. *Habit*: Aquatic free floating, herbaceous fern. *Use*: Green manure. *State of occurrence*: Occasional. *Specimen examined*: KKI1960 (DACB)

Salvinia cucullata Roxb. *ex* Bory, Voy. Indes or. (Belanger) Cryptogamie 2: 6. 1833. *Habit*: Aquatic fern. *Local name*: Indur kani. *Use*: Green manure. *State of occurrence*: Occasional. *Specimen examined*: KKI1942 (DACB)

Schizaeaceae Kaulf.

Lygodium flexuosum (L.) Sw., Schrad. J. Bot. 1800 (2): 106. 1801. *Ophioglossum flexuosum* L., Sp. Pl. 2: 1063. 1753. *Habit*: Climbing fern. *Local name*: Lata Dhekia. *Use*: Medicine. *State of occurrence*: Common. *Specimen examined*: KKI1995 (DACB).

Lygodium giganteum Tagawa & K.Iwats., Acta Phytotax. Geobot. 22: 97. 1967. *Habit*: Climbing fern. *Local name*: Lata Dhekia. *Use*: Fishing nets & baskets making element. *State of occurrence*: Common. *Specimen examined*: KKI1991 (DACB)

Thelypteridaceae Ching

Trigonospora calcarata (Blume) Holttum, Reinwardia 8: 506. 1974. *Habit*: Terrestrial fern. *State of occurrence*: Occasional. *Specimen examined*: KKI1986 (DACB).

GYMNOSPERMS

Cycadaceae Pers.

Cycus revolutus Thunb., Verh. Holl. Maatsch. Weetensch. Haarlem. 20(2): 424. 1782. *Habit*: Palm like tree. *Local name*: Moniraj, Mukut gachh. *Fl. & fr.*: May-October. *Use*: Ornamental. *State of occurrence*: Occasional. *Specimen examined*: KKI2001 (DACB).

Gnetaceae Lindl.

Gnetum montanum Mgf., Bull. Jar. Bot. Buitenz. ser. 3. 10: 466. 1910. *Gnetum scandens sensu* Hook.f., Fl. Brit. India 5: 642. 1885. *Habit*: Woody climber. *Local name*: Gola gachh. *Fl. & fr.*: February-June. *State of occurrence*: Common. *Specimen examined*: KKI2012 (DACB).

LILIOPSIDA (MONOCOTS)

Limnocharitaceae Takhtajan

Limnocharis flava (L.) Buchenau, Abh. Naturwiss. Vereine Bremen 2. 2: 1871. *Habit*: Aquatic herb. *Local name*: Lettuce pana. *Fl. & fr.*: March-April. *Use*: Pig fodder. *State of occurrence*: Rare. *Specimen examined*: KKI2021 (DACB).

Hydrocharitaceae A.Juss.

Hydrilla verticillata (L.f.) Royle, Ill. Bot. Himal. Mts.: 1376. 1839. *Serpicula verticillata* L.f., Suppl. Pl.: 41. 1782. *Habit*: Aquatic herb. *Local name*: Kanjal. *Fl. & fr.*: May-October. *Use*: Fish food. *State of occurrence*: Common. *Specimen examined*: KKI2051 (DACB).

Potamogetonaceae Dumor.

Potamogeton nodosus Poir. in Lam., Meth. Bot. Suppl. 4: 535. 1816. *Potamogeton indicus* Roxb., Fl. Ind. 1: 452. 1820. *Habit*: Aquatic herb. *Local name*: Lamba dub-agasa. *Fl. & fr.*: May-September. *Use*: Fish food. *State of occurrence*: Common. *Specimen examined*: KKI2057 (DACB).

Arecaceae C.H. Schultz-Schultzen.

Areca catechu L., Sp. Pl. 1189. 1753. *Areca macrocarpa* Becc, Philipp. J. Sci. 60. 1909. *Habit*: Tree. *Local name*: Supari. *Fl. & fr.*: March-September. *Use*: Medicine. *State of occurrence*: Common. *Specimen examined*: KKI2041 (DACB).

Calamus viminalis Willd., Sp. Pl. 2: 203. 1799. *Calamus litoralis* Blume, Rumphia 3: 43. 1847. *Habit*: Climbing cane. *Local name*: Bara bet. *Fl. & fr.*: Throughout the year. *Use*: Basketry and furniture. *State of occurrence*: Common. *Specimen examined*: KKI2060 (DACB).

Cocos nucifera L., Sp. Pl. 1188. 1753. *Cocos nana* Griff., Not. Pl. Asiat. 3: 166. 1851. *Habit*: Tree. *Local name*: Narical. *Fl. & fr.*: March-July. *Use*: Oil, Food and Fibre. *State of occurrence*: Common. *Specimen examined*: KKI2051 (DACB).

Daemonorops jenkinsiana (Griff.) Mart., Hist. Nat. Palm. 3: 327. 1853. *Calamus margaritae* Hance, J. Bot. 12: 266. 1874. *Habit*: Climbing cane. *Local name*: Golla bet. *Fl. & fr.*: July-April. *Use*: Furniture. *State of occurrence*: Occasional. *Specimen examined*: KKI2054 (DACB).

Pinanga gracilis Blume, Rumphia 2: 77. 1839. *Areca gracilis* Buch.-Ham., Mem. Wern. Nat. Hist. Soc. 5(2): 310. 1826. *Habit*: Palm. *Local name*: Ram gua. *Fl. & fr.*: June-January. *Use*: Ornamental. *State of occurrence*: Rare. *Specimen examined*: KKI2032 (DACB).

Wallichia densiflora Mart., Hist. Nat. Palm. 3: 190. 1845. *Wallichia oblongifolia* Griff., Calcutta J. Nat. Hist. 5: 486. 1845. *Habit*: Tree. *Local name*: Machher lenja. *Fl. & fr.*: April-May. *State of occurrence*: Occasional. *Specimen examined*: KKI2039 (DACB).

Pandanaceae R.Br.

Pandanus furcatus Roxb., Hort. Bengal. 71. 1814. *Pandanus spinifructus* Dennst., Schlüssel Hortus Malab. 27. 1818. *Habit*: Woody shrub. *Local name*: Keya. *Fl. & fr.*: July-February. *Use*: Ornamental. *State of occurrence*: Occasional. *Specimen examined*: KKI2054 (DACB).

Araceae A.Juss.

Aglaonema hookerianum Schott., Bonplandia (Hannover) 7: 30. 1859. *Aglaonema clarkei* Hook. f., Fl. Brit. India 6: 529. 1893. *Habit*: Herb. *Local name*: Harina sak. *Fl. & fr.*: June-July. *Use*: Ornamental. *State of occurrence*: Common. *Specimen examined*: KKI2066 (DACB).

Alocasia acuminata Schott, Bonplandia (Hannover) 7: 28. 1859. *Habit*: Herb. *Local name*: Bannyo kachu. *Fl. & fr.*: May-August. *State of occurrence*: Common. *Specimen examined*: KKI2070 (DACB).

Alocasia macrorrhizos (L.) G.Don, Hort. Brit. 3: 631. 1839. *Alocasia cordifolia* (Bory) Cordem. *Habit*: Herb. *Local name*: Mankachu. *Fl. & fr.*: July-August. *Use*: Medicine & food. *State of occurrence*: Occasional. *Specimen examined*: KKI2075 (DACB).

Amorphophallus paeoniifolius (Dennst.) Nicolson, Taxon 26: 337. 1977. *Amorphophallus campanulatus* Decne., Nouv. Ann. Mus. Hist. Nat. 3: 366. 1834. *Habit*: Herb. *Local name*: Olkachu. *Fl. & fr.*: May-November. *Use*: Vegetable and medicine. *State of occurrence*: Occasional. *Specimen examined*: KKI2099 (DACB).

Colocasia esculenta (L.) Schott, Melet. Bot. 18. 1832. *Arum chinense* L., Amoen. Acad. 4: 234. 1754. *Habit*: Herb. *Local name*: Mukhikachu. *Fl. & fr.*: May-October. *State of occurrence*: Common. *Specimen examined*: KKI2087 (DACB).

Colocasia oresbia A.Hay, Sandakania 7: 39. 1996. *Habit*: Herb. *Local name*: Sadakachu. *Fl. & fr.*: June-September. *Use*: Vegetable. *State of occurrence*: Occasional. *Specimen examined*: KKI2023 (DACB).

Colocasia fallax Schott, Bonplandia (Hannover) 7: 28. 1859. *Colocasia heterochroma* H. Li & Z.X.Weil, Acta Bot. Yunnan. 15: 16. 1993. *Habit*: Herb. *Local name*: Falkachu. *Fl. & fr.*: May-July. *Use*: Ornamental. *State of occurrence*: Occasional. *Specimen examined*: KKI2075 (DACB).

Homalomena aromatica (Roxb. ex Sim) Schott, Melet. Bot. 20. 1832. *Calla aromatica* (Spreng.) Roxb., Fl. Ind. 3: 513. 1832. *Habit*: Herb. *Local name*: Gandho-kachu. *Fl. & fr.*: June-September. *Use*: Medicine. *State of occurrence*: Common. *Specimen examined*: KKI2044 (DACB).

Lasia spinosa (L.) Thw., Enum. Pl. Zeyl. 336. 1864. *Lasia aculeata* Lour., Fl. Cochinch. 81. 1790. *Habit*: Herb. *Local name*: Kanta-kachu. *Fl. & fr.*: January-November. *Use*: Medicine and vegetable. *State of occurrence*: Common. *Specimen examined*: KKI2073 (DACB).

Pothos scandens L., Sp. Pl. 968. 1753. *Pothos angustifolius* (Raf.) C.Presl., Epimel. Bot. 243. 1851. *Habit*: Epiphytic creeper. *Local names*: Sunat, Sundad, Batilata. *Fl. & fr.*: January-December. *Use*: Medicine. *State of occurrence*: Common. *Specimen examined*: KKI2173 (DACB).

Rhaphidophora glauca (Wall.) Schott, Bonplandia (Hannover) 5: 45. 1857. *Scindapsus glaucus* (Wall.) Schott, Melet. Bot. 21. 1832. *Habit*: Climbing herb. *Local name*: Fidoca. *Fl. & fr.*: May-November. *Use*: Ornamental. *State of occurrence*: Occasional. *Specimen examined*: KKI1782 (DACB).

Rhaphidophora hongkongensis Schott, Prodr. Syst. Aroid. 378. 1860. *Pothos obliquus* Wall. ex Hook.f., Fl. Brit. India 6: 555. 1893. *Habit*: Climbing herb. *Local name*: Lata kachu. *Fl. & fr.*: May-August. *Use*: Medicine. *State of occurrence*: Rare. *Specimen examined*: KKI2083 (DACB).

Rhaphidophora peepla (Roxb.) Schott, Bonplandia (Hannover) 5: 45. 1857. *Pothos peepla* Roxb., Fl. Ind. 1: 454. 1820. *Habit*: Creeping herb. *Use*: Ornamental. *State of occurrence*: Rare. *Specimen examined*: KKI2035 (DACB).

Scindapsus officinalis (Roxb.) Schott, Melet. Bot. 21. 1832. *Pothos officinalis* Roxb., Fl. Ind. 1: 452. 1820. *Habit*: Creeping herb. *Local name*: Gaj pipul. *Fl. & fr.*: May-October. *Use*: Medicine. *State of occurrence*: Occasional. *Representative specimen*: KKI2028 (DACB).

Stuednera colocacifolia K.Koch, Wochenschr. Gärtnerei Pflanzenk. 1862: 114. 1862. *Stuednera henryana* Engl., Pflanzenr. 71(IV. 23E): 13. 1920. *Habit*: Herb. *Local name*: Ekdaijjakachu. *Fl. & fr.*: April-May. *State of occurrence*: Rare. *Specimen examined*: KKI1861 (DACB).

Stuednera discolor W.Bull, Gard. Chron. 708. 1875. *Stuednera discolor* var. *discolor* (W.Bull) Engl., Monogr. Phan. 2: 452. 1879. *Habit*: Herb. *Local name*: Bahari-kachu. *Fl. & fr.*: May-August. *Use*: Ornamental. *State of occurrence*: Rare. *Specimen examined*: KKI2095 (DACB).

Commelinaceae R.Br.

Amischotolype glabrata Hassk., Flora 46: 1863. *Amischotolype mollissima* (Blume) Hasaa., Flora 46: 391. 1863. *Habit*: Herb. *Fl. & fr.*: Throughout the year. *State of occurrence*: Common. *Specimen examined*: KKI2004 (DACB).

Commelina diffusa Burm.f., Fl. Ind. 18. 1768. *Commelina agraria* Kunth, Enum. Pl. 4: 38. 1843. *Habit*: Herb. *Fl. & fr.*: December-January. *Use*: Vegetable. *State of occurrence*: Common. *Specimen examined*: KKI2008 (DACB).

Floscopa scandens Lour., Fl. Cochinch. 193. 1790. *Commelina cymosa* Blume, Enum. Pl. Jav. 1: 4. 1827. *Habit:* Herb. *Fl. & fr.:* September-March. *Use:* Medicine. *State of occurrence:* Common. *Specimen examined:* KKI1854 (DACB).

Cyperaceae A.Juss.

Cyperus compactus Retz., Observ. Bot. 5: 10. 1788. *Cyperus dilutus* Vahl, Enum. Pl. Obs. 2: 357. 1805. *Habit:* Herb. *Fl. & fr.:* September-March. *State of occurrence:* Common. Representative specimen: KKI2116 (DACB).

Cyperus cyperoides (L.) Kuntze, Revis. Gen. Pl. 3(2): 333. 1898. *Habit:* Herb. *Local names:* Bara guthubi, Kucha kusha. *Fl. & fr.:* Throughout the year. *Use:* Weed. *State of occurrence:* Common. *Specimen examined:* KKI1856 (DACB).

Cyperus difformis L., Cent. Pl. 6. 1756. *Cyperus goeringii* Steud., Syn. Pl. Glumac. 2: 24. 1854. *Habit:* Herb. *Local name:* Behua ghass. *Fl. & fr.:* August-December. *Use:* Cattle fodder. *State of occurrence:* Throughout the year. *Specimen examined:* KKI2120 (DACB).

Cyperus digitatus Roxb., Fl. Ind. 1: 209. 1820. *Cyperus neesii* Kunth, Enum. Pl. 2: 101. 1837. *Habit:* Herb. *Local name:* Angul phul. *Fl. & fr.:* July-December. *Use:* Weed. *State of occurrence:* Occasional. *Specimen examined:* KKI2063 (DACB).

Cyperus distans L.f., Suppl. Pl. 103. 1782. *Cyperus kurrii* Steud., Syn. Pl. Glumac. 2: 38. 1854. *Habit:* Herb. *Local name:* Pani Malanga. *Fl. & fr.:* Throughout the year. *Use:* Weed. *State of occurrence:* Common. *Specimen examined:* KKI2092 (DACB).

Cyperus laxus Lam., Tabl. Encycl. 1: 146. 1791. *Cyperus laxus* subsp. *laxus*. *Habit:* Herb. *Local name:* Alga ghashi. *Fl. & fr.:* Throughout the year. *Use:* Medicine. *State of occurrence:* Common. *Specimen examined:* KKI1858 (DACB).

Cyperus malaccensis Lam., Tabl. Encycl. 1: 146. 1791. *Cyperus incurvatus* Roxb., Fl. Ind. 1: 200. 1820. *Habit:* Herb. *Local name:* Chumati pati. *Fl. & fr.:* May-October. *Use:* Hat making. *State of occurrence:* Common. *Specimen examined:* KKI2125 (DACB).

Cyperus pilosus Vahl., Enum. Pl. Obs. 2: 354. 1805. *Cyperus marginellus* Nees, Contr. Bot. India 83. 1834. *Habit:* Herb. *Local name:* Pasha kathai. *Fl. & fr.:* Throughout the year. *Use:* Weed. *State of occurrence:* Common. *Specimen examined:* KKI2104 (DACB).

Fimbristylis dipsacea (Rottb.) C.B. Clarke, Fl. Brit. India 6: 635. 1893. *Fimbristylis dipsacea* (Rottb.) Benth., Gen. Pl. 3: 1049. 1883. *Habit:* Herb. *Fl. & fr.:* Throughout the year. *Use:* Weed. *State of occurrence:* Occasional. *Specimen examined:* KKI (DACB).

Killinga microcephala Steud., Syn. Cyp.: 70. 1856. *Habit:* Herb. *Local name:* Nirbisha ghas. *Fl. & fr.:* July-November. *Use:* Weed. *State of occurrence:* Common.

Scleria terrestris (L.) Fassett, Rhodora 26: 159. 1924. *Scleria aspera* Boeckeler, Linnaea 38: 482. 1974. *Habit:* Herb. *Fl. & fr.:* March-August. *Use:* Weed. *State of occurrence:* Common. *Specimen examined:* KKI2140 (DACB).

Poaceae Barnhart

Arundo donax L., Sp. Pl. 81. 1753. *Arundo bifaria* Retz., Observ. Bot. 4: 21. 1786. *Habit:* Herb. *Local name:* Gaba-nal. *Fl. & fr.:* July-December. *Use:* Basket making. *State of occurrence:* Common. *Specimen examined:* KKI2136 (DACB).

Bambusa tulda Roxb. Fl. Ind. 2: 193. 1832. *Habit:* Herb. *Local name:* Mitinga bans. *Fl. & fr.:* September-May. *Use:* Vegetable and house making. *State of occurrence:* Common. *Specimen examined:* KKI2148 (DACB).

Cyrtococcum patens (L.) A.Camus, Bull. Mus. Natl. Hist. Nat. 27: 118. 1921. *Habit:* Herb. *Local name:* Patcocca grass. *Fl. & fr.:* Throughout the year. *Use:* Soil binder. *State of occurrence:* Occasional. *Specimen examined:* KKI2163 (DACB).

Digitaria sanguinalis (L.) Scop., Fl. Carniol. ed. 2, 1: 52. 1771. *Panicum sanguinale* L., Sp. Pl. 57. 1753. *Habit:* Herb. *Local name:* Anguli grass. *Fl. & fr.:* August-October. *Use:* Cattle fodder. *State of occurrence:* Common. *Specimen examined:* KKI2169 (DACB).

Hackelochloa granularis (L.) Kuntze, Revis. Gen. Pl. 2: 776. 1891. *Cenchrus granularis* L., Mant. Pl. 2: 575. 1771. *Habit:* Herb. *Fl. & fr.:* June-January. *Use:* Cattle fodder. *State of occurrence:* Very rare. *Specimen examined:* KKI2173 (DACB).

Imperata cylindrica (L.) Raeusch., Nomencl. Bot. ed. 3: 10. 1797. *Imperata koenigii* (Retz.) P. Beauv., Ess. Agrostogr. 165. 1812. *Habit:* Herb. *Local names:* Chhan, Ulo. *Fl. & fr.:* Throughout the year. *Use:* Cattle fodder. *State of occurrence:* Common. *Specimen examined:* KKI2184 (DACB).

Melocanna baccifera (Roxb.) Kurz., Prelim. Rep. Forest Pegu App. B: 94. 1875. *Bambusa baccifera* Roxb., Fl. Ind. 2: 197. 1832. *Habit:* Herb. *Local name:* Muli, Tarai. *Use:* Domestic uses. *State of occurrence:* Common. *Specimen examined:* KKI2187 (DACB).

Oryza sativa L., Sp. Pl. 333. 1753. *Oryza communissima* Lour., Fl. Cochinch. 215. 1790. *Habit:* Herb. *Local name:* Dhan. *Fl. & fr.:* September-June. *Use:* Food. *State of occurrence:* Common. *Specimen examined:* KKI2184 (DACB).

Panicum auritum J.Presl *ex* Nees., Fl. Bras. Enum. Pl. 2: 176. 1829. *Panicum javanum* Nees *ex* Buse, Pl. Jungh. 376. 1854. *Habit:* Herb. *Fl. & fr.:* May-December. *Use:* Cattle fodder. *State of occurrence:* Common. *Specimen examined:* KKI2190 (DACB).

Paspalum longifolium Roxb., Fl. Ind. 1: 280. 1820. *Paspalum flexuosum* Klein *ex* J.Presl, Reliq. Haenk. 1: 215. 1820. *Habit:* Herb. *Fl. & fr.:* May-August. *Use:* Cattle fodder. *State of occurrence:* Common. *Specimen examined:* KKI2193 (DACB).

Paspalum scrobiculatum L., Mant. Pl. 1: 29. 1767. *Paspalum kora* Willd., Sp. Pl. 1: 332. 1797. *Habit:* Herb. *Local names:* Goicha, Kodoa dhan. *Fl. & fr.:* Throughout the year. *Use:* Cattle fodder. *State of occurrence:* Common. *Specimen examined:* KKI2195 (DACB).

Phragmites karka (Retz.) Trin. *ex* Steud., Bot. 2, 2: 324. 1841. *Arundo karka* Retz., Observ. Bot. 4: 21. 1786. *Habit:* Herb. *Local name:* Nol-khagra. *Fl. & fr.:* Throughout the year. *Use:* Control soil erosion. *State of occurrence:* Common. *Specimen examined:* KKI2201 (DACB).

Pogonatherum crinitum (Thunb.) Kunth, Enum. Pl. 1: 478. 1833. *Andropogon crinitus* Thumb. Syst. Veg. 14. 903. 1784. *Habit:* Herb. *Local name:* Patlapogo grass. *Fl. & fr.:* March-September. *Use:* Cattle fodder. *State of occurrence:* Rare. *Specimen examined:* KKI2206 (DACB).

Rottboellia cochinchinensis (Lour.) Clayton, Kew Bull. 35: 817. 1981. *Aegilops fluviatilis* Blanco, Fl. Filip. 47. 1837. *Habit:* Herb. *Local name:* Bara Swati. *Fl. & fr.:* August-March. *Use:* Medicine. *State of occurrence:* Common. *Specimen examined:* KKI2211 (DACB).

Saccharum officinarum L., Sp. Pl. 54. 1753. *Saccharum monandrum* Rottb., Acta Lit. Univ. Hafn. 1: 285. 1777. *Habit:* Herb. *Local name:* Gandari. *Fl. & fr.:* August-October. *Use:* Suger. *State of occurrence:* Common. *Specimen examined:* KKI2215 (DACB).

Saccharum ravennae (L.) L., Syst. Veg. ed. 13, 2: 88. 1774. *Saccharum jamaicense* Trin., Mém. Acad. Imp. Sci. 2: 312. 1833. *Habit:* Herb. *Local name:* Kashphul. *Fl. & fr.:* July-December. *Use:* Soil binder. *State of occurrence:* Common. *Specimen examined:* KKI2221 (DACB).

Saccharum spontaneum L., Mant. Alt.: 183. 1771. *Habit:* Herb. *Local name:* Kash. *Fl. & fr.:* July-November. *Use:* Soil binder and Cattle fodder. *State of occurrence:* Common. *Specimen examined:* KKI2296 (DACB).

Setaria glauca (L.) Beauv., Ess. Agrostogr. 51. 1812. *Pennisetum glaucum* (L.) R.Br., Prodr. Fl. Nov. Holl. 195. 1810. *Habit:* Herb. *Local name:* Kawni. *Fl. & fr.:* September-December. *Use:* Cattle fodder. *State of occurrence:* Common. *Specimen examined:* KKI2198 (DACB).

Setaria pumila (Poir.) Roemer & Schultes, Syst. Veg. 2: 891. 1817. *Habit:* Herb. *Local name:* Kawni. *Fl. & fr.:* June-October. *Use:* Weed. *State of occurrence:* Occasional. *Specimen examined:* KKI (DACB).

Setaria palmifolia (J.Koenig) Stapf, J. Linn. Soc. Bot. 42: 186. 1914. *Agrostis plicata* Lour., Fl. Cochinch. 64. 1790. *Habit:* Herb. *Local name:* Urodhan. *Fl. & fr.:* August-December. *Use:* Cattle fodder. *State of occurrence:* Common. *Specimen examined:* KKI2275 (DACB).

Themeda villosa (Poir.) A.Camus, Fl. Indo-Chine 7: 364. 1922. *Anthistiria villosa* Lam., Tabl. Encycl. 5: 841. 3. 1799. *Habit:* Herb. *Local name:* Badami thema. *Fl. & fr.:* October-February. *Use:* Cattle fodder. *State of occurrence:* Common. *Specimen examined:* KKI1868 (DACB).

Thysanolaena latifolia (Roxb. ex Hornem.) Honda, J. Fac. Sci. Univ. Tokyo, Sect. 3, Bot. 3: 312. 1930. *Thysanolaena maxima* Kuntze, Revis. Gen. Pl. 2: 784. 1891. *Habit:* Herb. *Local name:* Jharu phul. *Fl. & fr.:* September-December and March-April. *Use:* Brooms. *State of occurrence:* Common. *Specimen examined:* KKI1844 (DACB).

Musaceae A.Juss.

Musa ornata Roxb., Fl. Ind. 2: 488. 1824. *Musa speciosa* Ten., Index Seminum (NAP) 1829: 16. 1829. *Habit:* Herb. *Local name:* Pahari Kola. *Fl. & fr.:* March-December. *Use:* Elephant fodder. *State of occurrence:* Common. *Specimen examined:* KKI2153 (DACB).

Musa paradisiaca L., Sp. Pl. 1043. 1753. *Musa sapientum* L., Syst. Nat. ed. 10, 2: 1303. 1759. *Habit:* Herb. *Local name:* Kola. *Fl. & fr.:* Throughout the year. *Use:* Fruit. *State of occurrence:* Common. *Specimen examined:* KKI1779 (DACB).

Zinziberaceae Lindl.

Alpinia malaccensis (Brum.f.) Rosc., Trans. Linn. Soc. London 8: 345. 1807. *Costus malaccensis* Koenig. *Habit:* Herb. *Local name:* Deotara. *Fl. & fr.:* May-August. *Use:* Medicine. *State of occurrence:* Occasional. *Specimen examined:* KKI1821 (DACB).

Alpinia nigra (Gaertn.) Burt., Notes Roy. Bot. Gard. Edinb. 35: 213. 1977. *Alpinia allughas* (Retz.) Rosc. 1807. *Habit:* Herb. *Local names:* Tara, Taruko. *Fl. & fr.:* May-December. *Use:* Medicine. *State of occurrence:* Rare. *Specimen examined:* KKI1780 (DACB).

Amomum dealbatum Roxb., Fl. Ind. 1: 42. 1820. *Habit:* Herb. *Local names:* Sada tara, Taruko. *Fl. & fr.:* May-January. *Use:* Medicine. *State of occurrence:* Rare. *Specimen examined:* KKI1795 (DACB).

Amomum subulatum Roxb., Fl. Ind. 1: 43. 1820. *Cardamomum subulatum* (Roxb.) Kunt., Revis. Gen. Pl. 2: 687. 1891. *Habit:* Herb. *Local name:* Lal tara. *Fl. & fr.:* May-August. *Use:* Medicine. *State of occurrence:* Occasional. *Specimen examined:* KKI2168 (DACB).

Curcuma longa L., Sp. Pl. 2. 1753. *Amomum curcuma* Jacq., Hort. Bot. Vindob. 3: 5. 1776. *Habit:* Herb. *Local names:* Halud, Haldi. *Fl. & fr.:* August-October. *Use:* Medicine and spice. *State of occurrence:* Common. *Specimen examined:* KKI2179 (DACB).

Curcuma zedoaria (Christm.) Rosc., Trans. Linn. Soc. London 8: 354. 1807. *Amomum latifolium* Lam., Encycl. 1: 134. 1783. *Habit:* Herb. *Local names:* Shoti, Failla. *Fl. & fr.:* April-August. *Use:* Medicine. *State of occurrence:* Common. *Specimen examined:* KKI12140 (DACB).

Etlingera linguiformis (Roxb.) R.M.Smith, Notes Roy. Bot. Gard. Edinburgh 43: 246. 1986. *Alpinia linguiformis* Roxb., Fl. Ind. 1: 73. 1820. *Habit:* Herb. *Local name:* Tara. *Fl. & fr.:* June-October. *Use:* Medicine. *State of occurrence:* Common. *Specimen examined:* KKI1791 (DACB).

Globba multiflora Wall. *ex* Baker, Fl. Brit. India 6: 202. 1890. *Globba velutina* Horan., Prodr. Monogr. Scitam. 20. 1862. *Habit*: Herb. *Fl. & fr.*: July-September. *State of occurrence*: Common. *Specimen examined*: KKI1838 (DACB).

Hedychium thyriforme Sm., Cycl. 17: 4. 1811. *Hedychium heteromallum* Ker Gawl., Bot. Reg. 9: 767. 1824. *Habit*: Herb. *Local name*: Pala ada. *Fl. & fr.*: August-february. *State of occurrence*: Occasional. *Specimen examined*: KKI2106 (DACB).

Kaempferia angustifolia Rose., Trans. Linn. Soc. London 8: 351. 1807. *Kaempferia roxburghiana* Schult., Mant. 1: 33. 1822. *Habit*: Herb. *Local name*: Chandumula. *Fl. & fr.*: June-August. *Use*: Medicine. *State of occurrence*: Rare. *Specimen examined*: KKI2138 (DACB).

Zingiber officinale Rosc., Trans. Linn. Soc. London 8: 348. 1807. *Habit*: Herb. *Local name*: Ada. *Fl. & fr.*: September-October. *Use*: Medicine and spice. *State of occurrence*: Common. *Specimen examined*: KKI2143 (DACB).

Costaceae Nakai

Cheilocostus speciosus (J.König) C.Specht, Taxon 55: 159. 2006. *Costus speciosus* (J.König) Sm., Trans. Linn. Soc. London 1: 249. 1791. *Habit*: Herb. *Local name*: Keumul, Kemul, Khustha. *Fl. & fr.*: September-December. *Use*: Medicine. *State of occurrence*: Common. *Specimen examined*: KKI2159 (DACB).

Marantaceae Peterson

Phrynium imbricatum Roxb. Fl. Ind. 1: 6. 1820. *Phrynium oliganthum* Merr., Philipp. J. Sci. 23: 239. 1923. *Habit*: Herb. *Local name*: Pitali pata. *Fl. & fr.*: April-September. *Use*: Wrapping materials. *State of occurrence*: Occasional. *Specimen examined*: KKI2178 (DACB).

Pontederiaceae Kunth

Eichhornea crassipes (Mart.) Solms in A.DC., Mon. Phan. 4: 527. 1883. *Habit*: Aquatic herb. *Local name*: Jarmuni. *Fl. & fr.*: Throughout the year. *Use*: Cattle fodder. *State of occurrence*: Common. *Specimen examined*: KKI1904 (DACB).

Monochoria hastata (L.) Solms in A.DC., Mon. Phan. 4: 523. 1883. *Habit*: Aquatic herb. *Local name*: Boro Pani-kachu. *Fl. & fr.*: Throughout the year. *Use*: Cattle fodder. *State of occurrence*: Common. *Specimen examined*: KKI1912 (DACB).

Haemodoraceae R.Br.

Peliosanthes teta Andr., Bot. Repos. 10. 605. 1810. *Habit*: Herb. *Local name*: Napigach. *Fl. & fr.*: November-February. *State of occurrence*: Common. *Specimen examined*: KKI1925 (DACB).

Peliosanthes violacea Hook.f., Fl. Brit. India 6: 266. 1892. *Habit*: Herb. *Fl. & fr.*: November-February. *State of occurrence*: Common. *Specimen examined*: KKI1938 (DACB).

Liliaceae A.Juss.

Crinum asiaticum L., Sp. Pl. 292. 1753. *Crinum anomalum*, Appendix 22. 1821. *Habit*: Herb. *Local name*: Barakanur. *Fl. & fr.*: March-August. *Use*: Ornamental and medicine. *State of occurrence*: Occasional. *Specimen examined*: KKI1946 (DACB).

Curculigo orchioides Gaertn., Fruct. Sem. Pl. 1: 63. 1788. *Curculigo malabarica* Wight, Icon. Pl. Ind. Orient. t. 2043. 1853. *Habit*: Herb. *Local name*: Talmuli. *Fl. & fr.*: June-August. *Use*: Medicine. *State of occurrence*: Rare. *Specimen examined*: KKI1954 (DACB).

Molineria capitulata (Lour.) Herb., 84. 1837. *Curculigo recurvata* W.T.Aiton., Hortus Kew. 2: 253. 1811. *Habit*: Herb. *Local name*: Satipata. *Fl. & fr.*: February-September. *Use*: Medicine. *State of occurrence*: Occasional. *Specimen examined*: KKI1775 (DACB).

Agavaceae Endl.

Agave americana L., Sp. Pl. 323. 1753. *Agave ornata* Jacobi, Hamburger Garten, Blume 21: 59. 1865. *Habit*: Herb. *Local name*: Satabdi-udvid. *Fl. & fr.*: July-October. *Use*: Ornamental. *State of occurrence*: Rare. *Specimen examined*: KKI1777 (DACB).

Agave cantula Roxb., Fl. Ind. 2: 167. 1832. *Habit*: Undershrub. *Fl. & fr.*: July-October. *Use*: Ornamental. *State of occurrence*: Occasional. *Specimen examined*: KKI1773 (DACB).

Dracaena spicata Roxb., Fl. Ind. 2: 157. 1832. *Dracaena wallichii* Kunth, Abh. Königl. Akad. Wiss Berlin 1842: 26. 1844. *Habit*: Shrub. *Local name*: Kado-drakan. *Fl. & fr.*: January-December. *State of occurrence*: Rare. *Specimen examined*: KKI1836 (DACB).

Taccaceae Dumort.

Tacca integrifolia Ker Gawl., Bot. Mag. 35: 1448. 1812. *Tacca cristata* Jack, Malayan Misc. 1(5): 23. 1820. *Habit*: Herb. *Local name*: Mati munda. *Fl. & fr.*: March-November. *Use*: Medicine. *State of occurrence*: Rare. *Specimen examined*: KKI1846 (DACB).

Smilacaceae Vent.

Smilax perfoliata Lour., Fl. Cochinch. 622. 1790. *Habit*: Climber. *Local name*: Kumarika. *Fl. & fr.*: November-March. *Use*: Medicine. *State of occurrence*: Occasional. *Specimen examined*: KKI1852 (DACB).

Smilax zeylanica L., Sp. Pl.: 1029. 1753. *Smilax indica* Burm.f., Fl. Ind. 213. 1768. *Habit*: Spiny climber. *Local name*: Kumarylata. *Fl. & fr.*: November-March. *Use*: Medicine. *State of occurrence*: Common. *Specimen examined*: KKI1849 (DACB).

Dioscoreaceae R.Br.

Dioscorea belophylla (Prain) Voigt ex Haines, Forest Fl. Chota Nagpur 530. 1910. *Habit*: Climber. *Local name*: Shora Alu. *Fl. & fr.*: June-October. *State of occurrence*: Rare. *Specimen examined*: KKI1870 (DACB).

Dioscorea bulbifera L., Sp. Pl. 1033. 1753. *Dioscorea latifolia* Benth., Niger Fl. 535. 1849. *Habit*: Climber. *Local name*: Rat-alu. *Fl. & fr.*: August-October. *Use*: Vegetable. *State of occurrence*: Occasional. *Specimen examined*: KKI1873 (DACB).

Dioscorea glabra Roxb., Fl. Ind. 3: 804. 1832. *Habit*: Climber. *Local name*: Shora-alu. *Fl. & fr.*: September-December. *Use*: Vegetable. *State of occurrence*: Common. *Specimen examined*: KKI1885 (DACB).

Dioscorea pentaphylla L., Sp. Pl.: 1032. 1753. *Dioscorea triphylla* L., Sp. Pl. 2: 1032. 1753. *Habit*: Climber. *Local name*: Jhum Alu. *Fl. & fr.*: June-December. *Use*: Vegetable. *State of occurrence*: Common. *Specimen examined*: KKI1888 (DACB).

Orchidaceae A.Juss.

Acampe ochracea (Lindl.) Hochr., Bull. New York Bot. Gard. 6: 270. 1910. *Habit*: Epiphytic herb. *Fl. & fr.*: November-January. *State of occurrence*: Occasional.

Aerides multiflora Roxb., Pl. Corom. 3: 68. 271. 1820. *Habit*: Epiphytic herb. *Local name*: Porgachha. *Fl. & fr.*: May-August. *Use*: Medicine and ornamental. *State of occurrence*: Rare. *Specimen examined*: KKI2085 (DACB).

Aerides odorata Lour., Fl. Cochinch. 525. 1790. *Aerides cornuta* Roxb., Fl. Ind. 3: 472. 1832. *Habit*: Epiphytic herb. *Local name*: Porgachha. *Fl. & fr.*: April-June. *Use*: Medicine and ornamental. *State of occurrence*: Rare. *Specimen examined*: KKI2089 (DACB).

Bulbophyllum lilacinum Ridl., J. Linn, Soc. 32: 276. 1896. *Habit*: Epiphytic herb. *Local name*: Bulbolia. *Fl. & fr.*: October-November. *Use*: Medicine. *State of occurrence*: Occasional. *Specimen examined*: KKI (DACB).

Cymbidium aloifolium (L.) Sw., Nova Acta Regiae Soc. Sci. Upsal. 6: 73. 1799. *Habit*: Epiphytic herb. *Local name*: Churi. *Fl. & fr.*: April-August. *Use*: Ornamental and Medicine. *State of occurrence*: Rare. *Specimen examined*: KKI2181 (DACB).

Dendrobium aphyllum (Roxb.) C.E.C. Fisch., Fl. Madras 1416. 1928. *Dendrobium cucullatum* R.Br., Bot. Reg. 7: 548. 1821. *Habit*: Epiphytic herb. *Local name*: Fasia Mach. *Fl. & fr.*: February-July. *Use*: Ornamental and Medicine. *State of occurrence*: Rare. *Specimen examined*: KKI2083 (DACB).

Goodeara procera (Ker Gawl.) Hook., Exot. Fl. 39. 1823. *Habit*: Terrestrial herb. *Fl. & fr.*: January-June. *State of occurrence*: Rare. *Specimen examined*: KKI2218 (DACB).

Phalaenopsis deliciosa Rchb.f., Bonplandia (Hannover) 2: 93. 1854. *Habit*: Epiphytic herb. *Fl. & fr.*: May-June. *Use*: Ornamental. *State of occurrence*: Rare. *Specimen examined*: KKI2021 (DACB).

Pholidota imbricata Lindl., Exot. Fl. 2. 138. 1825. *Habit*: Epiphytic herb. *Local name*: Folicata. *Fl. & fr.*: May-June. *Use*: Ornamental. *State of occurrence*: Occasional. *Specimen examined*: KKI2224 (DACB).

Rhynchostylis retusa (L.) Blume, Bijdr.: 286. 1825. *Habit*: Epiphytic herb. *Local name*: Shial leza pargacha. *Fl. & fr.*: May-July. *Use*: Ornamental and Medicine. *State of occurrence*: Occasional. *Specimen examined*: KKI2204 (DACB).

Staurochilus ramosus (Lindl.) Seidenf., Oper. Bot. 95: 95. 1988. *Habit*: Epiphytic herb. *Local name*: Torochi orchid. *Fl. & fr.*: May-October. *Use*: Ornamental and Medicine. *State of occurrence*: Rare. *Specimen examined*: KKI2272 (DACB).

Discussion

Taxonomic study of vascular flora (Pteridophytes, Gymnosperms and Liliopsida) of the Karnafuli river and its surrounding areas under Rangamati district has revealed a total of 128 species under 97 genera and 38 families. Among these, Liliopsida (Monocots) is represented by 105 species belonging to 77 genera and 21 families, whereas Pteridophytes having 21 species under 18 genera and 15 families and Gymnosperms having completely less representation, only 2 species under 2 genera and 2 Families. The study has revealed that in Liliopsida only 4 species are aquatic, 8 species are epiphyte and the remaining terrestrial. In Gymnosperms all species are terrestrial. Whereas, in Pteridophytes only 4 species are aquatic, 1 species are epiphyte and the remaining terrestrial. The study has also found that in Liliopsida Poaceae is the largest family with 22 species followed by Araceae (16 species), Cyperaceae, Zingiberaceae and Orchidaceae (11 species) and Arecaceae (6 species). But 7 families (*viz.* Taccaceae, Limnocharitaceae, Marantaceae, Costaceae, Pandanaceae, Potamogetonaceae and Hydrocharitaceae) are represented each by a single species. The genus *Cyperus* appears as the largest genus represented by 9 species. In Pteridophytes 10 families (*viz.* Selaginellaceae, Equisetaceae, Aspleniaceae, Azollaceae, Blechnaceae, Cyatheaceae, Lomalipteridaceae, Marsileaceae, Polypodiaceae and Thelypteridaceae) are represented each by a single species and remaining families (*viz.* Dryopteridaceae, Marantaceae, Pteridaceae, Schizaeaceae and Salviniaceae) are represented each by 2, 2, 3, 2, 2 respectively. On the other hand, in Gymnosperm all families (*viz.* Cycadaceae and Gnetaceae) are represented each by single species. The habit types as assessed, shows 99 species are herbs, 17 species are climbers, 2 species are bamboos 2 species is shrub 6 species are Palm and 2 species is tree like. On the other hand, among the collected specimens 51% plant species are common, 24%

plant species are occasional and others 25% plant species are rare that are found in the studied areas.

Among the collected plant specimens *Amomum dealbatum* Roxb, *Pholidota imbricata* Lindl., *Goodeara procera* (Ker Gawl.) Hook, *Peliosanthes violacea* Wall., *Kaempferia angustifolia* Rose., *Amomum subulatum* Roxb, *Steudnera discolor* W. Bull, *Steudnera colocacifolia* K. Koch, and *Gnetum montanum* Mgf. are very rare for the studied areas. The studied areas possesses four red listed plant species of Bangladesh, viz. *Aglaonema hookerianum* Schott., *Amomum aromaticum* Roxb., *Globba multiflora* Wall., as recorded by Khan *et al.* (2001). Besides those species, another one species i.e. *Colocasia oresbia* A. Hay, has been identified as threatened species for Bangladesh by Siddiqui *et al.* (2007b). From this analysis, it can be said that out of 128 species occurred in the study areas, 5 species are threatened. However, this figure may be much higher in near future if no immediate conservation action is taken.

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