

## POSSIBLY LOST ORCHID TREASURE OF BANGLADESH AND THEIR ENUMERATION WITH CONSERVATION STATUS

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### Abstract

The study aimed at determining the status of occurrence of the orchid treasure of Bangladesh for providing data for Planning National Conservation Strategy and Development of Conservation Management. 54 orchid species are assessed to be presumably lost from the flora of Bangladesh due to environmental degradation and ecosystem depletion. The assessment of their status of occurrence was made based on long term field investigation, collection and identification of orchid taxa; examination and identification of herbarium specimens preserved at CAL, E, K, DACB, DUSH, BFRIH, BCSIRH, HCU; and survey of relevant upto date floristic literature. These species had been recorded from the present Bangladesh territory for more than 50 to 100 years ago, since then no further report of occurrence or collection from elsewhere in Bangladesh is available and could not be located to their recorded localities through field investigations. Of these, 29 species were epiphytic in nature and 25 terrestrial. More than 41% of these taxa are economically very important for their potential medicinal and ornamental values. Enumeration of these orchid taxa is provided with updated nomenclature, bangla name(s) and short annotation with data on habitats, phenology, potential values, recorded locality, global distribution conservation status and list of specimens available in different herbaria.

**Key words:** Orchid species, lost treasure, Bangladesh, conservation status, assessment.

### INTRODUCTION

The orchid species belonging to the family Orchidaceae are represented mostly in the tropical parts of the world by 880 genera and about 26567 species (Cai *et al.* 2015) and a few in the arctic regions. In Asia, the family is rich with species diversity, represented by more than 1300 species in India, 579 species in Bhutan (Pearce and Cribb 2002), 450 species in Nepal (Pant *et al.* 2016) and 187 species in Bangladesh (Rahman *et al.* 2017).

It was William Roxburgh (1814) who for the first time recorded 12 species of orchids in his *Hortus Bengalensis (nom. nud.)* from the area now in Bangladesh and later described in his *Flora Indica* (1932), and many of his collections are still available at BM, K and E. Thereafter Nathalian Wallich (1828-1849), Hooker (1885-1890; 1890-1894), Kurz (1877), Prain (1903), Heinig (1925), Datta and Mitra (1953) and Sinclair (1956) subsequently made remarkable contributions towards the account of the Orchidaceae with a total of 110 species before independence of Bangladesh in 1971.

While assessing the status of occurrence of these recorded orchid taxa we came across the scenario that 54 recorded species of the family could not be located in their collection localities of Bangladesh during field investigations conducted by the authors themselves and even different works conducted on orchids since 1971 like, Seidenfaden (1978a, b; 1985, 1988), Moyeen (1982), Biswajit (1987), Khan and Halim (1987; 1991), Halim and Khan (1991), Ahmed and Pasha (1993, 1994, 1998, 1998a), Ahmed *et al.* (1993, 1989, 1989a, 1989b, 1989c, 1991, 1994), Rahman and Huda (1998, 2001), Huda and Rahman (1999), Huda *et al.* (1999, 2001), Khanam *et al.* (2001), Huda (2007, 2008), Islam *et al.* (2016), Rahman *et al.* (2017).

Moreover there is no report of occurrence of any of these taxa could be found even in different floristic works of Huq and Khan (1984), Khan *et al.* (1994), Rahman and Uddin (1997), Uddin *et al.* (1998), Uddin and Rahman (1999), Khan and Huq (2001), Rashid and Mia (2001), Uddin *et al.* (2002), Uddin and Hassan (2004), Momen *et al.* (2006), Islam *et al.* (2009), Tutul *et al.* (2009), Uddin and

Hassan (2010), Arefin *et al.* (2011), Rahman *et al.* (2012), Uddin and Hassan (2012), Uddin *et al.* (2013) and Rahman (2017).

Huda (2008) in his compilation of orchids in the *Encyclopedia of Flora and Fauna of Bangladesh* cited 179 taxa where 4 previously recorded species were missing. Islam *et al.* (2016) recently in their list of orchid taxa from greater Sylhet missed 10 species which had been previously recorded in the works of Wallich (1828-1849), Hooker (1885-1890), Barbhuiya and Gogoi (2010).

## MATERIAL AND METHODS

The study has been conducted on the family Orchidaceae of Bangladesh towards the inventory of its species diversity and their status of occurrence. Literature, relevant to the records of orchids of Bangladesh, has been thoroughly surveyed and a list of taxa prepared with their recorded localities in the flora, and these are: Seidenfaden (1978a, b; 1985, 1988), Moyeen (1982), Biswajit (1987), Khan and Halim (1987; 1991), Halim and Khan (1991), Ahmed and Pasha (1993, 1994, 1998, 1998a), Ahmed *et al.* (1993, 1989, 1989a, 1989b, 1989c, 1991, 1994), Rahman and Huda (1998, 2001), Huda and Rahman (1999), Huda *et al.* (1999, 2001), Khanam *et al.* (2001), Huda (2007, 2008), Islam *et al.* (2016), Rahman *et al.* (2017).

Upto date floristic literature published with local taxa have also been consulted for occurrence and distribution of orchids in different localities of Bangladesh, and these are: Huq and Khan (1984), Khan *et al.* (1994), Rahman and Uddin (1997), Uddin *et al.* (1998), Uddin and Rahman (1999), Khan and Huq (2001), Rashid and Mia (2001), Uddin *et al.* (2002), Uddin and Hassan (2004), Momen *et al.* (2006), Islam *et al.* (2009), Tutul *et al.* (2009), Uddin and Hassan (2010), Arefin *et al.* (2011), Rahman *et al.* (2012), Uddin and Hassan (2012) and Uddin *et al.* (2013).

The herbaria of local, national and international have been consulted and the specimens of orchids of Bangladesh critically examined, determined and prepared a list with their collection localities in order to locate them in the field and assess their present status of occurrence. The consulted herbaria are: BM, CAL, E, K, DACB, BFRIH (Bangladesh Forest Research Institute Herbarium), BCSIRH (Bangladesh Council for Science and Industrial Research), DUSH (Dakha University Salarkhan Herbarium), HCU (Herbarium of Chittagong University).

Field investigations have been made throughout the flora, especially in the recorded localities of orchid species since 1984 as regular botanical explorations. Identification and collection of orchid taxa have been made following standard taxonomic methods.

An enumeration of these possibly extinct taxa is prepared following Rahman (2013) where each species is cited with current nomenclature, synonym(s), Bangla name(s), habit, flowering and fruiting period, potential values, recorded localities, global distribution and list of herbarium specimens.

## RESULTS AND DISCUSSION

The study revealed that 54 (%) of the 187 recorded orchid taxa of Bangladesh are thought to be possibly lost from the flora according to the definition of extinct category (IUCN 2001) since these have no report of occurrence or could not be located in the wild for more than 50 to 100 years. This result coincide the report of lost asclepiad taxa (28.36%) by Rahman (2013). The data presented in the enumeration revealed that two species have no further report of collection from elsewhere in Bangladesh since Roxburgh (1832), six species since Wallich (1828-49), 29 species since Hooker (1885-1890), one species since Prain (1903), eight species since Heinig (1925) and eight species since Sinclair (1956).

Twenty five species recorded from greater Sylhet and thirteen species from Chittagong/Hill Tracts area until Hooker (1885-1890) have no further report in any later works. *Dendrobium transparens* Wall. ex Lindl., recorded from Sylhet by Barbhuiya and Gogoi (2010) based on collection of 1943, have no

report of second collection for more than 73 years. Rahman and Jahan (2016) recently reported about 9% of medicinal species of the Fabaceae possibly lost from Bangladesh. The study also revealed that 29 (%) species were epiphytic and 25 (%) terrestrial, and 22 (41%) of these were medicinal and 21 (39%) ornamental.

Orchids in the wild mostly found to grow as epiphytic on the trunk of old trees, like rain tree, dipterocarps, sal, jarul, banyan, mango etc. mostly in the rain forests of Chittagong, Cox's Bazar, Hill Tracts districts, Tangail and greater Sylhet. There are many deep forests in Hill Tracts districts most of which are inaccessible due to tribal/ political conflicts. It has been difficult to collect and locate many rare orchids from those forested areas. Moreover many old forests in greater Sylhet district existed before 1947, either fully or partially destroyed and many recorded rare orchids of both epiphytic and ground either disappeared or could not be located in their recorded habitats which are very much degraded now. Some of these taxa, thought to be extinct, could probably still be existed in remote/deep forest habitats. The family has not yet been inventoried for the *Flora of Bangladesh* and identification, collection and preservation of orchid taxa were not adequate and seemed to be insufficient works and publications have been made on the family. Due attention to the assessment and conservation management in the Orchids of Bangladesh has not been paid in the National Conservation Strategy. More intensive investigations to the very remote areas for collection and identification of orchids are required which may provide the rediscovery of some of these recorded taxa, thought to be lost. For instance, at least 7 species of orchids could be relocated by recent investigations, e.g. *Coelogyne cristata* Lindl. Hooker (1885-1890), *Oberonia gammiei* King and Pantl. Prain (1903) and *Eria bractescens* Lindl. Heinig (1925).

The loss of 54 species orchids from the flora of Bangladesh by 100 years warns that the family Orchidaceae is in most vulnerable state and need immediate and proper conservation measures before their disappearance from the wild for sustainability of the environment.

However, the study provided the status of occurrence and rate of extinction of orchid taxa in the wild, and data of recorded/collected localities on which basis further attempts for their rediscovery and conservation management could be taken (*in-situ/ex-situ*) following National Conservation Strategy of Bangladesh.

#### *Enumeration of possibly lost orchid taxa of Bangladesh*

##### **1. *Acampe cephalotes* Lindl., Fol. Orch. 4: 3 (1853).**

*Gastrochilus cephalotes* (Lindl.) Kuntze (1891); *Saccolabium cephalotes* (Lindl.) Hook.f. (1890). *Bangla name*: Not known. *Habitat*: Epiphytic. *Fl.-Fr.*: Not on record. *Potential value*: Ornamental.

*Recorded locality*: Sylhet (*Inc*). No report of collection Hook.f. (1890).

*Global distribution*: Bangladesh, Cambodia, China, India, Laos, Myanmar, Nepal, Taiwan and Vietnam.

*Herbarium specimens*: Sylhet: 19.11.1947, J. D. Hooker and T. Thomson 197 (K). No herbarium specimens available in DACB, DUSH, HCU, BFRIH and BCSIRH.

##### **2. *Acanthephippium sylhetense* Lindl., Gen. Sp. Orch. Pl.: 177 (1831).**

*Acanthephippium ringiflorum* Griff. (1851). *Bangla name*: Not known. *Habitat*: Terrestrial. *Fl.-Fr.*: April – May (Bose *et al.* 1999). *Potential Value*: Medicinal (<http://www.ecoindia.com/flora/s/orchid>).

*Recorded locality*: Sylhet (*Inc*). No report of collection Hook.f. (1890).

*Global distribution*: Bangladesh, China, NE India, Japan, Laos, Malaysia, Myanmar and Thailand.

*Herbarium specimens*: No herbarium specimens available in DACB, DUSH, HCU, BFRIH and BCSIRH.

##### **3. *Anoectochilus setaceus* Blume, Bijdr.: 412 (1825).**

*Anaectochilus roxburghii* (Wall.) Lindl. (1839); *A. setaceus* Lindl. (1837) *nom. illeg.*; *Chrysobaphus roxburghii* Wall. (1826); *Orchis picta* Reinw. *ex* Lindl. (1857). *Bangla name*: Not known. *Habitat*:

Terrestrial. *Fl.-Fr.*: April – June (Peace and Cribb 2002). *Potential Value*: Medicinal (Ratna *et al.* 2014).

*Recorded locality*: Sylhet (*Inc*). No report of collection Hook.f. (1890).

*Golbal distribution*: Bangladesh, Bhutan, China, India, Japan, Laos, Nepal, Thailand and Vietnam.

*Herbarium specimens*: No herbarium specimens available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**4. *Ascocentrum ampullaceum* (Roxb.) Schltr.** in Repert. Spec. Nov. Regni Veg. Beih. 1: 975 (1913).

*Aerides ampullacea* Roxb. (1832); *Oeceoclades ampullacea* (Roxb.) Lindl. ex Voigt (1845);

*Gastrochilus ampullaceus* (Roxb.) Kuntze (1891); *Saccolabium ampullaceum* (Roxb.) Lindl. (1832).

*Bangla name*: Not known. *Habitat*: Epiphytic. *Fl.-Fr.*: March-May (Yonzone *et al.* 2012). *Potential Value*: Not known.

*Recorded locality*: Sylhet (*Inc*). No report of collection Hook.f. (1890).

*Golbal distribution*: Bangladesh, Bhutan, China, India (including Andaman Islands), Laos, Myanmar, Nepal, and Thailand.

*Herbarium specimens*: No herbarium specimens available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**5. *Calanthe densiflora* Lindl., Gen. Sp. Orchid. Pl.: 250 (1833).**

*Alismorkis densiflora* (Lindl.) Kuntze (1891); *Calanthe kazuoi* Yamamoto (1930). *Bangla name*: Not known. *Habitat*: Terrestrial. *Fl.-Fr.*: August - October (Lang *et al.* 1999). *Potential Value*: Not known.

*Recorded locality*: Sylhet (*Inc*). No report of collection Wallich (1824).

*Golbal distribution*: Bangladesh, Bhutan, China, India, Japan, Nepal and Vietnam.

*Herbarium specimens*: Sylhet: F. De Silva, Wall. Cat. 7344 (K). No herbarium specimens are available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**6. *Calanthe puberula* Lindl., Gen. Sp. Orchid. Pl.: 252 (1833).**

*Alismorkis puberula* (Lindl.) Kuntze (1891); *Calanthe amoena* W. W. Smith (1921); *C. lepida* W. W. Smith (1921). *Bangla name*: Not known. *Habitat*: Terrestrial. *Fl.-Fr.*: October – December (Peace and Cribb 2002). *Potential Value*: Medicinal (Pant 2013).

*Recorded locality*: Sylhet (*Inc*). No report of collection Lindley (1830-1840).

*Golbal distribution*: Bangladesh, Bhutan, China, India, Japan, Myanmar, Nepal, Taiwan and Vietnam.

*Herbarium specimens*: Sylhet: F. D. Silva, Wall. Cat. no 7342 (K). But no herbarium specimens are available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**7. *Cleisostoma subulatum* Blume, Bijdr.: 363 (1825).**

*Cleisostoma dealbatum* Lindl. (1843); *Sarcanthus secundus* Griff. (1851); *S. oxyphyllus* Wall. ex Reichb.f. (1855); *S. subulatus* (Blume) Reichb.f. (1857); *S. secundus* Griff. (1851). *Bangla name*: Not known. *Habitat*: Epiphytic. *Fl.*: August – October (Internet). *Potential Value*: Not known.

*Recorded locality*: Chittagong (*Inc*) (Prain 1903), CHT (*Inc*) (Heinig 1925), Sundribans (Prain 1903), Sylhet (*Inc*) (Hook.f. 1890). No report of collection Heinig (1925).

*Golbal distribution*: Bangladesh, Bhutan, India, eastern Himalayas, Myanmar, Thailand, Cambodia, Vietnam, Malaysian peninsula, Sumatra, Java, Lesser Sunda Islands, Borneo, the Moluccas and the Philippines.

*Herbarium specimens*: No herbarium specimens available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**8. Coelogyne punctulata** Lindl., Coll. Bot. ad t. 33 (1821).

*Coelogyne brevifolia* Lindl.; *C. nitida* (Roxb.) Hook.f. (1890), *C. ocellata* Lindley; *Cymbidium nitidum* Roxb. (1832), not Wallich ex D. Don (1825); *Pleione goweri* (Reich.) Kuntze (1891); *P. nitida* Kuntze (1891). *Bangla name*: Not known. *Habitat*: Epiphytic. *Fl.-Fr.*: March – April (Peace and Cribb 2002). *Potential Value*: Medicinal (Deb *et al.* 2009).

*Recorded locality*: Sylhet (*Inc*). No report of collection after Roxburgh (1832) by its synonym *Cymbidium nitidum* Roxb.

*Golbal distribution*: Bangladesh, Bhutan, China, NE India, Myanmar and Nepal.

*Herbarium specimens*: No herbarium specimens available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**9. Crepidium biauratum** (Lindl.) Szlach., Fragm. Florist. Geobot. Suppl. 3: 124 (1995).

*Crepidium andamanicum* (King and Pantl.) Marg. and Szlach. (2001); *Malaxis andamanica* (King and Pantl.) N. P. Balakr and V. Rao (1981); *M. brevicaulis* (Schltr.) S. Y. Hu (1974); *M. biaurita* Kuntze (1891); *Microstylis andamanica* King and Pantl. (1897); *M. biaurita* Lindl. (1830); *M. brevicaulis* Schltr. (1919); *M. thorelii* Finet (1907). *Bangla name*: Not known. *Habitat*: Terrestrial. *Fl.-Fr.*: July - October (Hook.f. 1890). *Potential Value*: Medicinal (San *et al.* 2015).

*Recorded locality*: Sylhet (Pandua). No report of collection Wallich (1832).

*Golbal distribution*: Andaman Islands, Bangladesh, China, India, Laos, Myanmar, Nepal, Thailand.

*Herbarium specimens*: Sylhet: Pandua, 1832, Wallich, Wall. Cat. 1941 (K). But no herbarium specimens are available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**10. Crepidium calophyllum** (Rchb.f.) Szlach., Fragm. Florist. Geobot. Suppl. 3: 125 (1995).

*Epidendrum variegatum* König (1791); *Liparis elegantissima* Ridl. (1888); *Malaxis calophylla* (Reichb. f.) Kuntze (1891); *M. scottii* (Hook.f.) Kuntze (1891); *Microstylis calophylla* Reichb. f. (1879); *M. scottii* Hook.f. (1890); *M. wallichii* var. *brachycheila* Hook.f. (1890). *Bangla name*: Not known. *Habitat*: Terrestrial. *Fl.-Fr.*: July (Peace and Cribb 2002). *Potential Value*: Horticultural.

*Recorded locality*: Dhaka (*Inc*). No report of collection after Hook.f. (1890).

*Golbal distribution*: Bangladesh, Borneo, Cambodia, China, India (Sikkim), Indonesia, Malaysia, Myanmar, Thailand and Vietnam.

*Herbarium specimens*: No herbarium specimens available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**11. Dendrobium angulatum** Lindl. Gen. Sp. Orchid. Pl. 88 (1830).

*Callista angulata* Kranzl (1891); *Dendrobium inconcinnum* Ridl. (1896); *D. podagraria* Hook.f. (1890) *nom. illeg.* *Bangla name*: Not known. *Habitat*: Epiphytic. *Fl.-Fr.*: April – May (Gogoi *et al.* 2014). *Potential Value*: Horticultural plant.

*Recorded locality*: Chittagong (*Inc*; Prain 1903) and CHT (*Inc*; Heinig 1925). No report of collection Heinig (1925).

*Golbal distribution*: Bangladesh, India, Myanmar, southwestern Thailand and Vietnam.

*Herbarium specimens*: Bangladesh: 1821, De Silva 2001/2 (K). But no herbarium specimens are available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**12. Dendrobium blumei** Lindl., Sp. Orchid. Pl. 88 (1830).

*Aporum blumei* (Lindl.) Rauschert (1983); *Callista boothii* (Teijsm. and Binn.) Kuntze (1891); *C. tuberifera* (Hook.f.) Kuntze (1891); *Dendrobium tuberiferum* Hook.f. (1890); *Onychium fimbriatum* Blume (1825). *Bangla name*: Not known. *Habitat*: Epiphytic. *Fl.-Fr.*: Late winter and early spring (IOSPE PHOTOS). *Potential Value*: Not known.

*Recorded locality:* Chittagong (*Inc*). No report of collection Hook.f. (1890).

*Golbal distribution:* Bangladesh, Borneo, Java, Malaysia and Thailand.

*Herbarium specimens:* No herbarium specimens are available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**13. *Dendrobium chryseum*** Rolfe, Gard. Chron. Ser. 3, 3: 233 (1888).

*Callista aurantiaca* Kuntze (1891); *Dendrobium aurantiacum* Reichb.f. (1887); *D. clavatum* Wall. ex Lindl. (1852); *D. flaviflorum* Hayata (1911); *D. rivesii* Gagnep. (1930); *D. tibeticum* Schltr. (1921).

*Bangla name:* Not known. *Habitat:* Epiphytic. *Fl.-Fr.:* June (Peace and Cribb 2002). *Potential Value:* Not known.

*Recorded locality:* Sylhet (*Inc*). No report of collection Hook.f. (1890).

*Golbal distribution:* Bangladesh, Bhutan, China, eastern Himalayas, India, Laos, Myanmar, Nepal, Taiwan, Thailand, Vietnam and Western Himalayas.

*Herbarium specimens:* No herbarium specimens are available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**14. *Dendrobium crepidatum*** Lindl. and Paxton, Paxt. Fl. Gard. 1: 63 (1850).

*Callista crepidata* (Lindl. and Paxton) Kuntze (1891); *Dendrobium lawanum* Lindl. (1859); *Dendrochilum roseum* Dalz. (1852). *Bangla name:* Not known. *Habitat:* Epiphytic. *Fl.-Fr.:* April - May (Abraham and Vatsala 1981). *Potential Value:* Medicinal (Nongdam 2014; Pant 2013).

*Recorded locality:* Cox's Bazar (Below Pagoda on hill side). No report of collection Sinclair (1956).

*Golbal distribution:* Bangladesh, Bhutan, China, India, Laos, Myanmar, Nepal, Thailand and Vietnam.

*Herbarium specimens:* Cox's Bazar: Below Pagoda on hill side, 01.03.1945, Sinclair *s.n.* (K). No herbarium specimens are available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**15. *Dendrobium lituiflorum*** Lindl., Gard. Chron.: 372 (1856).

*Callista lituiflora* (Lindl.) Kuntze (1891); *Dendrobium hanburyanum* Reichb.f (1856). *Bangla name:* Not known. *Habitat:* Epiphytic. *Fl.-Fr.:* February - April (Huda 2000). *Potential Value:* Horticultural.

*Recorded locality:* CHT (*Inc*; Heinig 1925), Cox's Bazar (*Inc*; Sinclair 1956). No report of collection from Cox's Bazar Sinclair (1956).

*Golbal distribution:* Bangladesh, China, India, Laos, Myanmar, Thailand and Vietnam.

*Herbarium specimens:* No herbarium specimens are available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**16. *Dendrobium longicornu*** Lindl., Gen. Sp. Orchid. Pl. 80 (1830).

*Callista longicornis* (Lindl.) Kuntze (1891); *Dendrobium bulleyi* Rolfe (1913); *D. flexuosum* Griff. (1851); *D. hirsutum* Griff. (1851); *Froscula hispida* Raf. (1838). *Bangla name:* Not known. *Habitat:* Epiphytic. *Fl.-Fr.:* August - December (Huda 2008). *Potential Value:* Medicinal (Pant 2013).

*Recorded locality:* Sylhet (*Inc*). No report of collection de Silva (1821).

*Golbal distribution:* Bangladesh, Bhutan, China, NE India, Myanmar, Nepal, and Vietnam.

*Herbarium specimens:* Sylhet: 1821, F. De Silva 1997(2), (K). But no herbarium specimens available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**17. *Dendrobium moschatum*** (Buch.-Ham.) Sw. in Schltr., Neues J. Bot. 1: 94 (1805).

*Callista calceola* (Carey ex Hook.) Kuntze (1891); *C. moschata* Kuntze (1891); *Cymbidium moschatum* Willd. (1805); *Dendrobium calceolaria* Carey ex Hook. (1825); *D. cupreum* Herb. ex Lindl. (1835); *D. moschatum* Wall. ex D. Don (1825); *D. calceolaria* Carey ex Hook. (1825); *Epidendrum moschatum*

Buch.-Ham. (1800). *Bangla name*: Not known. *Habitat*: Epiphytic. *Fl.-Fr.*: May – July (Huda 2000). *Potential Value*: Medicinal (Pant 2013).

*Recorded locality*: Chittagong (*Inc*; Prain 1903), Cox's Bazar (near Buddhist Monastery; Sinclair 1956), CHT (*Inc*; Heinig 1925), Sylhet (near Forest School). No collection Sarkar (1956).

*Golbal distribution*: Bangladesh, Bhutan, China, India, Laos, Myanmar, Nepal, Thailand and Vietnam.

*Conservation measures proposed*: Further search should be made to relocate this species, if exists, then *in-situ* or *ex-situ* or both conservation measures to be taken as appropriate.

*Herbarium specimens*: Cox's Bazar: near Buddhist Monastery, 09.05.1945, Sinclair *s.n.* (K). Sylhet: near Forest School, 13.03.1956, Sarkar *s.n.* (DUSH) and no herbarium specimens available in DACB, HCU, BFRIH and BCSIRH.

**18. *Dendrobium ochreatum*** Lindl. in Edwards's Bot. Reg. 21 (Misc.): t. 1756 (1835).

*Callista ochreata* (Lindl.) Kuntze (1891); *Dendrobium cambridgeanum* Paxton (1839). *Bangla name*: Not known. *Habitat*: Epiphytic. *Fl.-Fr.*: February - April (Huda 2000). *Potential Value*: Medicinal (San *et al.* 2015).

*Recorded locality*: Chittagong (*Inc*; Hook.f. 1890, Prain 1903) and CHT (*Inc*; Heinig 1903). No report of collection Heinig (1925).

*Golbal distribution*: Bangladesh, India, Myanmar, Thailand and Vietnam.

*Herbarium specimens*: Chittagong: a. 1828, Bruce, Wall. Cat. 7410 (K). But no herbarium specimens available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**19. *Dendrobium pachyphyllum*** (Kuntze) Bakh.f. in Blumea 12: 69 (1963).

*Bolbodium pumilum* (Kuntze) Brieger (1981); *B. pusillum* (Blume) Rausch. (1983); *Callista pachyphylla* Kuntze (1891); *C. pusilla* (Blume) Kuntze (1891); *C. pumila* Kuntze (1891); *Desmotrichum pusillum* Blume (1825); *Dendrobium pusillum* (Blume) Lindl. (1830) *nom. illeg.*; *D. pumilum* Roxb. (1832) *nom. illeg.*; *D. perpusillum* Balakar. (1970). *Bangla name*: Not known. *Habitat*: Epiphytic. *Fl.-Fr.*: July – August (Bhattacharjee and Dutta 2010). *Potential Value*: Medicinal (Kirtikar and Basu 1981).

*Recorded locality*: Chittagong (*Inc*), CHT (*Inc*), Cox's Bazar (*Inc*). No report of collection from Cox's Bazar Ompdale and Ahmed (1945).

*Golbal distribution*: Bangladesh, Borneo, India, Java, Malaysia, Myanmar, Sumatra, Thailand and Vietnam.

*Herbarium specimens*: Cox's Bazar: 06.07.1945, Ompdale and Ahmed *s.n.* (DUSH) and no herbarium specimens available in DACB, HCU, BFRIH and BCSIRH.

**20. *Dendrobium palpebrae*** Lindl., J. Hort. Soc. 5: 33 (1850).

*Callista palpebrae* (Lindl.) Kuntze (1891); *C. palpebrae* (Lindl.) Brieger (1981); *Dendrobium farmeri* var. *album* Regel (1868). *Bangla name*: Not known. *Habitat*: Epiphytic. *Fl.-Fr.*: April – May (Bhattacharjee and Dutta 2010). *Potential Value*: Horticultural plant.

*Recorded locality*: Chittagong (*Inc*; Prain 1903) and CHT (*Inc*; Heinig 1925). No report of collection Heinig (1925).

*Golbal distribution*: Bangladesh, India, Laos, Myanmar Thailand and Vietnam.

*Herbarium specimens*: No herbarium specimens available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**21. *Dendrobium pulchellum*** Roxb. *ex* Lindl., Gen. Sp. Orchid. Pl.: 82 (1830).

*Callista pulchella* (Roxb. *ex* Lindl.) Kuntze (1891); *Dendrobium brevifolium* Lindl. (1858); *D. dalhousieanum* Wall. (1844); *D. moschatum* Griff. (1851). *Bangla name*: Not known. *Habitat*: Epiphytic. *Fl.-Fr.*: February – April (Hook.f. 1890). *Potential Value*: Medicinal (San *et al.* 2015).

*Recorded locality:* Sylhet (*Inc*). No report of collection Roxburgh (1832).

*Golbal distribution:* Bangladesh, eastern Himalayas, India, Laos, Malaysia, Myanmar, Nepal, Thailand, Vietnam and Yunnan China.

*Herbarium specimens:* No herbarium specimens are available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**22. *Dendrobium ruckeri*** Lindl. in Edwards's Bot. Reg. 29 (Misc.): 25 (1843).

*Callista ramosa* (Lindl.) Kuntze (1891); *C. ruckeri* (Lindl.) Kuntze (1891); *Dendrobium ramosum* Lindl. (1830) *nom. illeg.* *Bangla name:* Not known. *Habitat:* Epiphytic. *Fl.-Fr.:* Not on record. *Potential Value:* Horticultural Plant.

*Recorded locality:* Sylhet (Pandua). No report of collection Hook.f. (1890).

*Golbal distribution:* Bangladesh, eastern Himalayas, India, Laos and Myanmar.

*Herbarium specimens:* Sylhet: Pandua, a. 1832, Wallich, Wall. Cat. 2003 (K). But no herbarium specimens available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**23. *Dendrobium transparens*** Wall. *ex* Lindl., Gen. Sp. Orchid. Pl.: 79 (1830).

*Callista transparens* (Wall.) Kuntze (1891); *Dendrobium henshalli* Reichb.f. (1855). *Bangla name:* Not known. *Habitat:* Epiphytic. *Fl.-Fr.:* May (Huda 2000). *Potential Value:* Medicinal (Pant 2013).

*Recorded locality:* Chittagong (*Inc*; Prain 1903), HT (*Inc*; Heinig 1903), Sylhet (*Inc*). No report of collection from Sylhet Deka (1943).

*Golbal distribution:* Bangladesh, Bhutan, India, Myanmar and Nepal.

*Herbarium specimens:* Sylhet: 30.04.1943, G.K. Deka 22189 (ASSAM) but no herbarium specimens are available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**24. *Eria paniculata*** Lindl., Pl. Asiat. Rar. 1: 32 (1830).

*Callista floribunda* (D. Don) Kuntze (1891); *Dendrobium floribundum* D. Don (1825); *Mycaranthes floribunda* (D. Don) S.C. Chen & J.J. Wood (2009); *Pinalia paniculata* (Lindl.) Kuntze (1891). *Bangla name:* Not known. *Habitat:* Terrestrial or Epiphytic. *Fl.-Fr.:* January – May (Peace and Cribb 2002). *Potential Value:* Not known.

*Recorded locality:* Sylhet (*Inc*). No report of collection Wallich (1824).

*Golbal distribution:* Bangladesh, Cambodia, Chinese Himalayas, Laos, the eastern Himalayas, Myanmar, Nepal, Thailand and Vietnam.

*Herbarium specimens:* Sylhet: 1824, Silva, Wall. Cat. no. 1971 (K). But no herbarium specimens are available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**25. *Erythrodes blumei*** (Lindl.) Schltr. in Fl. Schutzgeb. Sudsee Nachtr.: 87 (1905).

*Erythrodes humilis* (Blume) J. J Smith (1907); *Microchilus blumei* (Lindl.) D. Dietr (1852); *Physurus humilis* Blume (1859); *P. blumei* Lindl. (1840); *P. chinensis* Rolfe (1896). *Bangla name:* Not known. *Habitat:* Terrestrial. *Fl.-Fr.:* January – March (Jayaweera 1981). *Potential Value:* Horticultural plant.

*Recorded locality:* Sylhet (*Inc*; Lindley 1830-1840; Hook.f. 1890). No report of collection after Hook.f. (1890) by its synonym *Physurus blumei* Lindl.

*Golbal distribution:* Bangladesh, China, India, Indonesia, Java, Malaysia, Myanmar, Sumatra, Thailand and Vietnam.

*Herbarium specimens:* Sylhet: 1832, F. De Silva, Wall. Cat. 7397 (K, K-W). But no herbarium specimens are available in DACB, DUSH, HCU, BFRIH and BCSIRH.



**26. *Eulophia bracteosa*** Lindl., Gen. Sp. Orch. Pl.: 180 (1833).

*Eulophia grandiflora* Lindl. (1833); *Geodorum bracteatum* Voigt (1845); *Graphorkis bracteosa* (Lindl.) Kuntze (1891). *Bangla name*: Not known. *Habitat*: Terrestrial. *Fl.-Fr.*: August (Hook.f. 1890). *Potential Value*: Horticultural plant.

*Recorded locality*: Chittagong (*Inc*; Hook.f. 1890, Prain 1903); HT (Heinig 1925). No report of collection Heinig (1925).

*Golbal distribution*: Bangladesh, China, India and Myanmar.

*Herbarium specimens*: Chittagong: no date, Bruce Wall. Cat. no. 7366 (K). But no herbarium specimens are available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**27. *Eulophia dabia*** (D. Don) Hochr., Bull. New York Bot. Gard. 6: 270 (1910).

*Bletia dabia* D. Don (1825); *Eulophia campestris* Wall. ex Lindl. (1833); *Eulophia ramentacea* (Roxb.) Lindl. (1833); *E. rupestris* Wall. ex Lindl. (1833); *Geodorum ramentaceum* (Roxb.) Voigt (1845); *Graphorkis campestris* (Wall. ex Lindl.) Kuntze (1891); *G. dabia* (D. Don) Kuntze (1891); *G. rupestris* (Wall. ex Lindl.) Kuntze (1891); *Limodorum dabia* (D. Don) Buch.-Ham. ex D. Don (1825); *L. ramentaceum* Roxb. (1832). *Bangla name*: *Salab Misri, Pranada*. *Habitat*: Terrestrial c. *Fl.-Fr.*: March (Ahmed and Pasha 1998). *Potential Value*: Medicinal (Pant 2013).

*Recorded locality*: Chittagong (*Inc*). No report of collection after Heinig (1925) by its synonym *Eulophia campestris* Wall. ex Lindl.

*Golbal distribution*: Afghanistan, Bangladesh, Bhutan, China, India, Kashmir, Nepal, Pakistan, Tajikistan, Turkmenistan and Uzbekistan.

*Herbarium specimens*: No herbarium specimens available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**28. *Eulophia herbacea*** Lindl., Gen. Sp. Orch. Pl.: 182 (1833).

*Eulophia vera* Royle (1839); *E. albiflora* Edgew. ex Lindl. (1859); *E. brachypetala* Lindl. (1859); *E. lachnocheila* Hook.f. (1890); *Geodorum bicolor* (Roxb.) Voigt (1845); *Limodorum bicolor* Roxb. (1832). *Bangla name*: Not known. *Habitat*: Terrestrial. *Fl.-Fr.*: May -July (Ahmed and Pasha 1998). *Potential Value*: Medicinal (Patil and Mahajan 2013). Bulb edible. A nutritious starch. (Ken 2014).

*Recorded locality*: Rangpur (*Inc*). No report of collection Hook.f. (1890).

*Golbal distribution*: Bangladesh, China, India, Laos, Nepal and Thailand.

*Herbarium specimens*: No herbarium specimens are available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**29. *Gastrochilus calceolaris*** (Buch.-Ham. ex Smith) D. Don, Prodr. Fl. Nepal.: 32 (1825).

*Aerides calceolaris* Buch.-Ham. ex Smith (1818); *A. leopardorum* Wall. ex Hook.f. (1890); *Epidendrum calceolare* (Buch.-Ham. ex Smith) D. Don (1825); *Sarcochilus nepalensis* Spreng. (1826) *nom. illeg.*; *Saccolabium calceolare* (Buch.-Ham. ex Smith) Lindl. (1833). *Bangla name*: Not known. *Habitat*: Epiphytic. *Fl.-Fr.*: March – May (Peace and Cribb 2002). *Potential Value*: Medicinal (Oudhia 2012).

*Recorded locality*: Sylhet (*Inc*). No report of collection Hook.f. (1890).

*Golbal distribution*: Bangladesh, Bhutan, China, India, Malaysia (Peninsular), Myanmar, Nepal, Thailand and Vietnam.

*Herbarium specimens*: No herbarium specimens are available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**30. *Geodorum recurvum*** (Roxb.) Alston in Handb. Fl. Ceylon 6 (Suppl.): 276 (1931).

*Geodorum dilatatum* R. Br. (1813); *Limodorum recurvum* Roxb. (1795). *Bangla name*: Not known. *Habitat*: Terrestrial. *Fl.-Fr.*: April -January (Lang *et al.* 1999). *Potential Value*: Medicinal (Hossain 2011).

*Recorded locality:* Sylhet (*Inc*). No report of collection Hook.f. (1890).

*Golbal distribution:* Bangladesh, China, Cambodia, India, Myanmar, Thailand and Vietnam.

*Herbarium specimens:* No herbarium specimens are available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**31. *Habenaria digitata*** Lindl., Gen. Sp. Orch. Pl.: 307 (1833).

*Bonatea punduana* Lindl. ex Wall (1828-49) *ined.*; *B. herbacea* Wall. ex Lindl. (1835); *B. benghalensis* Griff. (1844); *Habenaria laciniata* Dalz. (1850); *H. trinervia* Wight (1851); *H. travancorica* Hook.f. (1890). *Bangla name:* Not known. *Habitat:* Terrestrial. *Fl.-Fr.:* August -November (Joseph 1987). *Potential Value:* Medicinal (Oudhia 2012).

*Recorded locality:* Sylhet (*Inc*; Hook.f. 1890); East Bengal (*Inc*; Prain 1903). No report of collection after Prain (1903) from East Bengal and also No report of collection from Sylhet Hook.f. (1890).

*Golbal distribution:* Bangladesh, Cambodia, China, eastern Himalayas, Laos, Myanmar, Nepal, Pakistan and western Himalayas.

*Herbarium specimens:* No herbarium specimens are available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**32. *Habenaria diphylla*** (Nimmo) Dalz. in Hook., J. Bot. Kew Gard. Misc. 2: 262 (1850).

*Habenaria jardoniana* Wight (1851); *H. sutteri* Reichb.f. (1852); *Liparis diphyllus* Nimmo (1839). *Bangla name:* Not known. *Habitat:* Terrestrial. *Fl.-Fr.:* June -September (Joseph 1987). *Potential Value:* Horticultural plant.

*Recorded locality:* Dhaka (*Inc*). No report of collection after Hook.f. (1890).

*Golbal distribution:* Bangladesh, Bhutan, China, eastern Himalayas, India, Myanmar, Nepal, Thailand and the Philippines.

*Herbarium specimens:* No herbarium specimens are available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**33. *Habenaria gracilis*** Coleb., Exot. Fl.: t. 135 (1824).

*Bonatea gracilis* Lindl. (1835). *Bangla name:* Not known. *Habitat:* Terrestrial. *Fl.-Fr.:* Not on record. *Potential Value:* Not known.

*Recorded locality:* Sylhet (*Inc*). No report of collection after Hook.f. (1890).

*Golbal distribution:* Bangladesh and Brazil.

*Herbarium specimens:* No herbarium specimens are available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**34. *Liparis gamblei*** Hook.f., Icon. Pl. Ser. 3(19): t. 1812 (1889).

*Leptorkis gamblei* (Hook.f.) Kuntze (1891). *Bangla name:* Not known. *Habitat:* Terrestrial. *Fl.-Fr.:* June - July (Peace and Cribb 2002). *Potential Value:* Not known.

*Recorded locality:* CHT (*Inc*). No report of collection is available in CAL Lister (1876).

*Golbal distribution:* Bangladesh, Bhutan, NE India and Vietnam.

*Herbarium specimens:* No herbarium specimens available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**35. *Luisia volucris*** Lindl., Fol. Orch. 4: 1 (1853).

Not available. *Bangla name:* Not known. *Habitat:* Epiphytic. *Fl.-Fr.:* March –April (Huda 2000).

*Potential Value:* Horticultural.

*Recorded locality:* Chittagong (*Inc*; Hook.f. 1890; Prain 1903), Sylhet (*Inc*; Hook.f. 1890); HT (*Inc*; Heinig 1925). No report of collection Heinig (1925).

*Golbal distribution:* Bangladesh, Borneo, India and the eastern Himalayas.

*Herbarium specimens:* No herbarium specimens are available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**36. Oberonia mannii** Hook.f., Ic. Pl. 21: t. 2003 (1890).

Not available. *Bangla name*: Not known. *Habitat*: Epiphytic. *Fl.-Fr.*: March – June (Lang *et al.* 1999). *Potential Value*: Not known.

*Recorded locality*: Sylhet (*Inc*). No report of collection Hook.f. (1890).

*Golbal distribution*: Bangladesh, China and India.

*Herbarium specimens*: No herbarium specimens available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**37. Pachystoma pubescens** Blume, Bijdr. 376, t. 29 (1825).

*Apaturia chinensis* Lindl. (1831); *A. lindleyana* Wight (1851); *A. montana* Lindl. (1831); *A. senilis* Lindl. (1831); *Epipactis scariosa* Buch.-Ham. (1831); *Neottia pantanis* Korth. *ex* Blume (1856); *Pachychilus chinensis* (Lindl.) Blume (1856); *P. montanus* (Lindl.) Blume (1856); *P. pantanus* Blume (1856); *Pachystoma senile* (Lindl.) Reichb.f. (1858); *P. senile* (Lindl.) Trimen (1885) *nom. illeg.*; *Pachystoma fortunei* Reichb.f. (1852); *P. gracile* Schltr. (1906); *P. speciosum* (Blume) Reichb.f. (18580); *P. wightii* Reichb.f. (1862). *Bangla name*: Not known. *Habitat*: Terrestrial. *Fl.-Fr.*: February – May (Pearce and Cribb 2002). *Potential Value*: Not known.

*Recorded locality*: Cox's Bazar (*Behind Kelatuli*). No report of collection after Sinclair (1945) by its synonym *Pachystoma senile* (Lindl.) Reichb.f.

*Golbal distribution*: Australia, Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Laos, Malaysia, Myanmar, Nepal, New Guinea, Philippines and Vietnam.

*Herbarium specimens*: Cox's Bazar: Behind Kelatuli, 24.02.1945, Sinclair *s.n.* (K). No herbarium specimens are available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**38. Paphiopedilum insigne** (Wall. *ex* Lindl.) Pfitz., Jahrb. Wiss. Bot. 19: 159 (1888).

*Cypripedium insigne* Wall. *ex* Lindl. 1824; *Paphiopedilum insigne* var. *sylhetense* (Desbois) Pfitz. (1903); *Paphiopedilum insigne* var. *wallacei* (Desbois) Pfitz. (1903); *Paphiopedilum macfarlanei* F.G. Mey (1934). *Bangla name*: Not known. *Habitat*: Terrestrial. *Fl.-Fr.*: October–March (Hook.f. 1890). *Potential Value*: Horticultural.

*Recorded locality*: Sylhet (*Inc*). No report of collection Wallich (1824).

*Golbal distribution*: Bangladesh, China, India and Nepal.

*Herbarium specimens*: Sylhet: 1824, F. De Silva, Wall. Cat. 7022 (K). But no herbarium specimens are available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**39. Paphiopedilum venustum** (Wall. *ex* Sims) Pfitz., Jahrb. Wiss. Bot. 19: 165 (1888).

*Cypripedium venustum* Wall. *ex* Sims (1820); *C. pardinum* Reichb.f. (1869) *Cordula venusta* (Wall. *ex* Sims) Rolfe (19120); *Stimegas venustum* (Wall. *ex* Sims) Raf. (1838). *Bangla name*: Not known. *Habitat*: Terrestrial. *Fl.-Fr.*: Marchy – May (Pearce and Cribb 2002). *Potential Value*: Not known.

*Recorded locality*: Sylhet (*Inc*). No report of collection Hook.f. (1890).

*Golbal distribution*: Bangladesh, Bhutan, China, India and Nepal.

*Herbarium specimens*: Sylhet: Wallich and C.; Wall. Cat. 7023 (K-W). But no herbarium specimens are available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**40. Pecteilis triflora** (D. Don) Tang & Wang, Acta Phytotax. Sin. 1: 62 (1951).

*Habenaria triflora* D. Don (1825); *H. uniflora* Buch.-Ham. *ex* D. Don (1825); *Platanthera candida* Lindl. (1835) *nom. illeg.*; *P. uniflora* (D. Don) Lindl. (1835); *Orchis uniflora* Buch.-Ham. *ex* D. Don (1825). *Bangla name*: Not known. *Habitat*: Terrestrial. *Fl.-Fr.*: August (Huda 2008). *Potential Value*: Horticultural.

*Recorded locality*: Mymensingh (*Inc*). No report of collection Hook.f. (1890).

*Golbal distribution*: Bangladesh, India and Nepal.

*Herbarium specimens*: No herbarium specimens are available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**41. Phalaenopsis deliciosa** Reichb. f., *Bonplandia* 2: 93 (1854).

*Aerides latifolia* Thw. (1864) *nom. illeg.*; *Doritis latifolia* Trimen (1885); *D. wightii* (Reichb.f.) Benth. and Hook.f. (1883); *Phalaenopsis wightii* Reichb. f. (1862); *Kingidium deliciosum* (Reichb. f.) Sweet (1970); *Kingiella decumbens* (Griff.) Rolfe (1917). *Bangla name*: Not known. *Habitat*: Epiphytic. *Fl.-Fr.*: Throughout the year (Hook.f. 1890). *Potential Value*: Medicinal (Oudhia 2012a).

*Recorded locality*: Chittagong (*Inc*; Hook.f. 1890, Prain 1903). CHT (*Inc*; Heinig 1925). No report of collection after Heinig (1925) by its synonym *Doritis wightii* (Reichb.f.) Benth. and Hook.f.

*Golbal distribution*: Bangladesh, Cambodia, China, India, Indonesia, Laos, Malaysia, Myanmar, Nepal, Philippines, Sri Lanka, Thailand and Vietnam.

*Herbarium specimens*: No herbarium specimens are available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**42. Podochilus khasianus** Hook.f., *Fl. Brit. India* 6: 81 (1890).

*Podochilus chinensis* Schltr. (1924). *Bangla name*: Not known. *Habitat*: Epiphytic or Lithophytic. *Fl.-Fr.*: March – May (Pearce and Cribb 2002). *Potential Value*: Horticultural.

*Recorded locality*: Sylhet (*Inc*). No report of collection Hook.f. (1890).

*Golbal distribution*: Bangladesh, Bhutan, China, India and Vietnam.

*Herbarium specimens*: Sylhet: F. De Silva, Wall. Cat. 7335B (K-W). But no herbarium specimens available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**43. Pteroceras teres** (Blume) Holttum in *Kew Bull.* 14: 217 (1960).

*Aerides suaveolens* Roxb. (1832); *Dendrocolla teres* Blume (1825); *Ornitharium striatulum* Lindl. & Paxton (1851); *Pteroceras radicans* Hassk. (1842); *Sarcophilus suaveolens* (Roxb.) Hook.f. (1890). *Bangla name*: Not known. *Habitat*: Epiphytic. *Fl.-Fr.*: June (Pearce and Cribb 2002). *Potential Value*: Horticultural.

*Recorded locality*: Chittagong (*Inc*). No report of collection after Hook.f. (1890).

*Golbal distribution*: Bangladesh, Borneo, Cambodia, eastern Himalayas, India, Java, Laos, Lesser Sunda Islands, Moluccas, Myanmar, Nepal, Thailand, the Philippines, Sulawesi, Sumatra and Vietnam.

*Herbarium specimens*: No herbarium specimens are available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**44. Schoenorchis gemmata** (Lindl.) Smith, *Nat. Tijdschr. Ned.-Indie.* 72: 100 (1912).

*Cleisostoma gemmatum* (Lindl.) King & Pantl. (1899); *C. dichroanthum* Gagnep. (1951); *C. leisostoma evrardii* Gagnep. (1932); *C. gemmatum* (Lindl.) King and Pantl. (1899); *Gastrochilus gemmatus* (Lindl.) Kuntze (1891); *Saccolabium hainanense* Rolfe (1894); *S. gemmatum* Lindl. (1838); *S. spatulatum* Rolfe ex Downie (1925). *Bangla name*: Not known. *Habitat*: Epiphytic. *Fl.-Fr.*: May – June (Pearce and Cribb 2002). *Potential Value*: Horticultural.

*Recorded locality*: Sylhet (*Inc*). No report of collection Hook.f. (1890).

*Golbal distribution*: Bangladesh, Bhutan, Cambodia, China, India, Laos, Myanmar, Nepal, Thailand and Vietnam.

*Herbarium specimens*: No herbarium specimens are available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**45. Spathoglottis pubescens** Lindl., *Gen. Sp. Orchid. Pl.*: 120 (1831).

*Epipactis graminifolia* Roxb. (1832); *Pogonia graminifolia* (Roxb.) Voigt (1845); *Spathoglottis bensonii* Hook.f. (1890); *S. fortunei* Lindl. (1845); *S. khasyana* Griff. (1851); *S. parvifolia* Lindl. (1845); *S. pubescens* var. *parvifolia* (Lindl.) Hook.f. (1890). *Bangla name*: Not known. *Habitat*: Terrestrial. *Fl.-Fr.*: June – September (Huda 2008). *Potential Value*: Horticultural.

*Recorded locality:* Sylhet (*Inc*). No report of collection Lindley (1830 - 1840).

*Golbal distribution:* Bangladesh, Bhutan, Cambodia, China, Hong Kong, India, Laos, Myanmar, Thailand and Vietnam.

*Herbarium specimens:* East Bengal: 14.10.1835, Griffith 5194 (K). But no herbarium specimens are available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**46. *Tainia latifolia*** (Lindl.) Reichb.f., *Bonplandia* 5: 54 (1857).

*Ania latifolia* Lindl. (1831); *Cymbidium fuscescens* Griff. (1851); *Mitopetalum latifolium* (Lindl.) Blume (1856); *Tainia angulata* (Reichb.f.) Benth. *ex* Kraenzl. (1911); *T. cordata* Hook.f. (1890); *T. hastata* (Lindl.) Hook.f. (1890); *T. hologlossa* (E.C. Parish and Rchb.f.) Benth. *ex* Hook.f. (1890); *T. khasiana* Hook.f. (1890). *Bangla name:* Not known. *Habitat:* Terrestrial. *Fl.:* March (Pearce and Cribb 2002). *Potential Value:* Horticultural.

*Recorded locality:* Sylhet (*Inc*). No report of collection Hook.f. (1890).

*Golbal distribution:* Bangladesh, Bhutan, Cambodia, China, India, Java, Laos, Myanmar, Thailand and Vietnam.

*Herbarium specimens:* Sylhet: Wallich, Wall. Cat. 3741 (K-W, K). But no herbarium specimens are available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**47. *Thecostele alata*** (Roxb.) Parish and Reichb. f. in *Trans. Linn. Soc.* 30: 135 and 144, t. 29 (1874).

*Cymbidium alatum* Roxb. (1832); *C. annamense* Gagnep. (1950); *C. wrayi* Hook.f. (1890); *Thecostele maculosa* Ridl. (1893); *T. zollingeri* Reichb. f. (1857). *Bangla name:* Not known. *Habitat:* Epiphytic. *Fl.:* July (Huda 2000). *Potential Value:* Horticultural.

*Recorded locality:* Chittagong (*Inc*). No report of collection after Hook.f. (1890) by its synonym *Thecostele zollingeri* Reichb. f. (1857).

*Golbal distribution:* Bangladesh, Borneo, Java, Laos, Malayasia, Myanmar, Sumatra, Thailand, the Philippines and Vietnam.

*Herbarium specimens:* No herbarium specimens are available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**48. *Trias oblonga*** Lindl., *Gen. Sp. Orch. Pl.:* 60 (1830).

*Bulbophyllum burkillii* Gage (1906); *B. oblongum* (Lindl.) Reichb.f (1864); *B. moulmiense* Reichb.f (1861); *Dendrobium tripterum* Wall. (1890); *Trias ovata* Lindl. (1830). *Bangla name:* Not known. *Habitat:* Epiphytic. *Fl.-Fr.:* Spring (IOSPE PHOTOS). *Potential Value:* Horticultural.

*Recorded locality:* Sundarbans. No report of collection Prain (1903).

*Golbal distribution:* Bangladesh, India, Myanmar and Thailand.

*Herbarium specimens:* No herbarium specimens are available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**49. *Tropidia angulosa*** (Lindl.) Blume, *Coll. Orchid:* 122 (1859).

*Cnemidia angulosa* Lindl. (1833); *C. semilibera* Lindl. (1833); *Decaisnea angulosa* (Lindl.) Wall. (1828-49) *ined.*; *Govindooia nervosa* Wight (1853); *Tropidia govindovii* Blume (1859); *T. semilibera* (Lindl.) Blume (1859). *Bangla name:* *Angupida*. *Habitat:* Terrestrial. *Fl.-Fr.:* August – November (Pearce and Cribb 2002). *Potential Value:* Medicinal (Chopra *et al.* 1969).

*Recorded locality:* Sylhet (*Inc*; Hook.f. 1890), Khulna (*Inc*). No report of collection after Khalil from Khulna in 1941.

*Golbal distribution:* Bangladesh, Bhutan, China, India, Indonesia, Japan, Java, Malaysia, Myanmar, Sumatra, Thailand, the Philippines and Vietnam.

*Herbarium specimens*: Khulna: 10.06.1941, Khalil *s.n.* (DUSH) but no herbarium specimens are available in DACB, HCU, BFRIH and BCSIRH.

**50. *Uncifera acuminata*** Lindl., *J. Proc. Linn. Soc., Bot.* 3: 40 (1859).

*Saccolabium acuminatum* (Lindl.) Hook.f. (1890). *Bangla name*: Not known. *Habitat*: Epiphytic. *Fl.-Fr.*: July – September (Pearce and Cribb 2002). *Potential Value*: Horticultural.

*Recorded locality*: CHT (*Inc*). No report of collection after Lister (1876).

*Golbal distribution*: Bangladesh, Bhutan, China, India and Nepal.

*Herbarium specimens*: No herbarium specimens are available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**51. *Vanda cristata*** Lindl., *Gen. Sp. Orch. Pl.*: 216 (1833).

*Aerides cristata* (Lindl.) Wall. *ex* Hook.f. (1890); *Vanda striata* Reichb.f. (1868). *Bangla name*: Not known. *Habitat*: Epiphytic. *Fl.*: May (Pearce and Cribb 2002). *Potential Value*: Medicinal (Behera *et al.* 2013).

*Recorded locality*: Sylhet (*Inc*). No report of collection after Hook.f. (1890).

*Golbal distribution*: Bangladesh, Bhutan, China, India, Nepal and Vietnam.

*Herbarium specimens*: No herbarium specimens are available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**52. *Vanilla aphylla*** Blume, *Bijdr.*: 422 (1825).

*Vanilla calopogon* Reichb.f. (1878); *V. parishii* Reichb.f. (1878). *Bangla name*: *Vanilla Orchid*. *Habitat*: Hemi-epiphytic or terrestrial. *Fl.-Fr.*: Not on record. *Potential Value*: Horticultural.

*Recorded locality*: Chittagong (*Inc*; Prain 1903), HT (*Barkal*; Heinig 1925). No report after Heinig (1925).

*Golbal distribution*: Bangladesh, India, Java, Laos, penninsular Malaysia, Myanmar, Philippines, Thailand and Vietnam.

*Herbarium specimens*: No herbarium specimens are available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**53. *Vrydagzynea albida*** (Blume) Blume, *Coll. Orchid*: 71 (1858).

*Hetaeria albida* Blume (1825); *Physurus viridiflorus* Lindl. (1857); *Vrydagzynea viridiflora* (Lindl.) Hook.f. (1890); *V. viridifolia* Hook. f. (1890). *Bangla name*: Not known. *Habitat*: Terrestrial. *Fl.-Fr.*: September – November (Pearce and Cribb 2002). *Potential Value*: Horticultural.

*Recorded locality*: Lakshmipur (*Inc*). No report of collection after Hook.f. (1890) by its synonym *Vrydagzynea viridifolia* Hook. f. (1890)

*Golbal distribution*: Bangladesh, Borneo, India, Java, Malayisa, New Guinea, Sumatra, Thailand, the Philippines and Vietnam.

*Herbarium specimens*: No herbarium specimens are available in DACB, DUSH, HCU, BFRIH and BCSIRH.

**54. *Zeuxine affinis*** (Lindl.) Benth. *ex* Hook.f., *Fl. Brit. India* 6: 108 (1890).

*Adenostylis arisanensis* (Hayata) Hayata (1915); *Monochilus affinis* Lindl. (1840); *Zeuxine arisanensis* Hayata (1914); *Z. sutepensis* Rolfe *ex* Downie (1925); *Z. taiwaniana* S.S.Ying (1987). *Bangla name*: Not known. *Habitat*: Terrestrial. *Fl.-Fr.*: February April (Lang *et al.* 1999). *Potential Value*: Medicinal (Oudhia 2012).

*Recorded locality*: Rangamati (*Inc*) (Barbhuiya and Gogoi 2010). No collection after Wenger's collection in 1939).

*Golbal distribution*: Bangladesh, Bhutan, China, India, Laos, Malaysia, Myanmar, Nepal, Thailand and Vietnam.

*Herbarium specimens*: Rangamati: May, 1939, W.J.L. Wenger 23481 (ASSAM) and No herbarium specimens are available in DACB, DUSH, HCU, BFRIH and BCSIRH.

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