

Present Status of Orchid Species Diversity Resources and Distribution in Dibrugarh District of Assam of North East India

Khyanjeet Gogoi^{1,*}, R. L. Borah², G. C. Sharma³, Rajendra Yonzone⁴

¹Daisa Bordoloi Nagar, Talap, Tinsukia, Assam, 786156, India

²Dept. of Botany, DHSK College, Dibrugarh, Assam, 786001, India

³Dept. of Botany Guwahati University, Assam, 781014, India

⁴Dept. of Botany, St. Joseph's College, P.O. North Point, District Darjeeling, W. B., 734104, India

Abstract Present paper deals with the present status of Orchid diversity resources in Dibrugarh District of Assam of North East India. A total of 113 Orchid species under 50 genera have been recorded from the regions. Of them, 29 species with 17 genera are terrestrial and the rest 84 species with 33 genera are epiphytic. This attempt is the first step to correct taxonomic identification and assessment to workout currently accepted botanical names, Voucher specimen, habitat, phenology and locality of Orchid species occurring in Dibrugarh District of Assam of North East India.

Keywords Orchid Species, Present Status, Diversity Resources, Dibrugarh District, Assam, N.E. India

1. Introduction

Orchids belong to the family Orchidaceae is considered to be the most highly evolved in the floral specialization and diversified form among the monocotyledons. In India, Orchids from 9% of our flora and are the largest and highly advanced botanical family of higher plants. It is estimated that at about 25,000-35,000 species with 800-1,000 genera are distributed throughout the world. About 1331 species with 184 genera of Orchid species are found in India with temperate Himalayas as their natural home. North-East India constitutes an orchid hotspot, with nearly 70 percent of the total Orchids found in India are found in this region[1] and Assam is the second largest state of North East India and is a rich storehouse of Indian Orchids. The forests of Assam possess a large number of beautiful important Orchids. The total number of Orchid species may be around 193 under 71 genera out of which 27 are endemics.

1.1. Study Area

Dibrugarh District is located in the eastern part of upper Assam with an area of 3381 sq. km. The district extends from 27°5' N to 27°42' N latitude and 94°33' E to 95°29' E longitude. It is bounded by Dhemaji district on the north, Sivasagar district on the south and south east, Tinsukia district on the east and Lakhimpur district on the west. The area

stretches from the North bank of the mighty Brahmaputra, which flows for a length of 95 km. Through the northern part of the district in the Patkai foothills in the south. At the foothills the altitude is 200m MSL and the Burhidihing river bank is 99m MSL (Fig. 1).

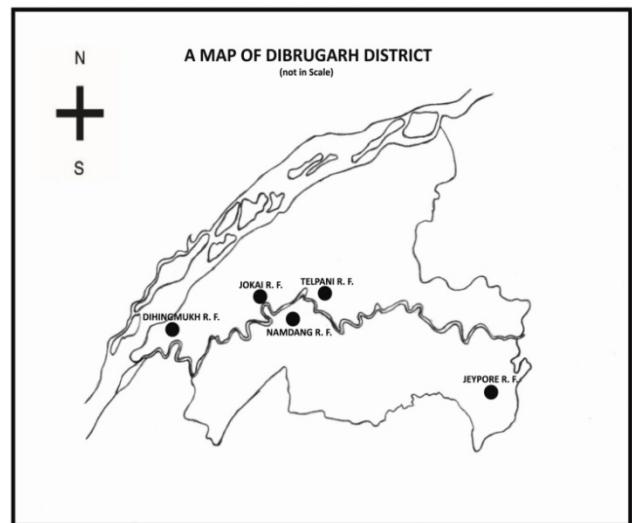


Figure 1. Map of Dibrugarh district (study area) of Assam

In Dibrugarh district, the total area under forest is 217941.648 hectares, according to the forest department. There are five reserve forests in the district, namely Joypore- 10876.68 hectares, Jokai- 1848.01 hectares, Namdang- 1858.63 hectares, Telpani- 1332.288 hectares and Dihingmukh- 5879.04 hectares.

Jokai, Namdang, Telpani and Dihingmukh are mixed forest with evergreen patches, types are 3/152 and 4D/SSI[2]

* Corresponding author:

khyanjeetgogoi@gmail.com (Khyanjeet Gogoi)

Published online at <http://journal.sapub.org/ijmb>

Copyright © 2012 Scientific & Academic Publishing. All Rights Reserved

Joypur Reserve forest forms a part of the world heritage of tropical/sub-tropical wet evergreen forest, classified as 1B/CI, multistoried in structure and rich in biodiversity, more popularly known as ‘Rain forest’(Fig. 2). The forest is rich in biodiversity and one of the greatest reservoirs of Orchid germplasm due to its high rainfall, relative humidity etc. All these forests are close to the bank of river Buridihing or touching it.



Figure 2. Joypur Reserve Forest, Assam

1.2. Climate

Dibrugarh District has a unique photographic element, the area experiences subtropical monsoon climate with mild winters, warm and humid summer. The maximum rainfall is in summer (2740mm-3640mm) and the minimum rainfall is during winter (430mm-700mm). The maximum temperature ranges between 33°C to 37°C and minimum temperature between 8°C to 10°C.

The climate can be classified into four seasons of the year,

a. Winter: From November to January. The maximum temperature ranges between 27°C to 29°C and the minimum temperature between 8°C to 10°C.

b. Pre-Monsoon: From March to May constitute this season. Temperature start raising, which ranges between 28°C to 32°C.

c. Monsoon: From June to August constitute this season. The maximum temperature ranges between 33°C to 37°C. Maximum rainfall recorded at its peak is 3000mm.

d. Retreating monsoon: From the last week of September or the first week of October the monsoon starts retreating until winter arrives.

Thus the cycle repeats year after year.

2. Materials and Method

The intensive field survey works were carried out during 2006 - 2011 covering all the seasons of the year in all parts of Dibrugarh district of Assam including floral nurseries, floral farms and forest areas. Collected Orchid specimens were made into standard mounted herbarium sheets following the procedure of[3]. The authors have done photographs and sketch the available Orchid species from the region. The

relevant data from the field notebooks were then transferred to the labels of the herbarium sheets and computer. Normally, 2-3 specimens of each species in flowering or fruiting stage were collected and life form photographs were prepared. The specimens were identified, described and nomenclature checked with the help of the genera and species of Orchidaceous plants[4]; Folia Orchidacea[5]; Contributions to the Orchidology of India-I[6]; Contributions to the Orchidology of India-II[7]; The orchids of the Sikkim Himalayas[8]; Orchids of India-II: Biodiversity and Status of Bulbophyllum[9]; A Guide to the Orchid of Sikkim[10]; The Orchids of Thailand[11]; The Orchid Flora of North-West Himalaya[12]; Notes on Cirrhopetalum[13]; Indian Orchids Guide to Identification and Culture[14]; Indian Orchids Guide to Identification and Culture[15]; Orchids of Mussoorie[16]; Orchids of Arunachal Pradesh[17]; Flora of British India[18]; Orchids of Kumaun Himalaya[19]; The Orchids of Indo-China[21]; A Catalogue of Indian Orchids[21]; Orchids of Nagaland[22]; Contribution to the Orchid flora of Thailand[23]; Orchidaceae of Arunachal Pradesh[24]; Orchid Flora of Arunachal Pradesh[25]; 100 Sikkim Himalayan Orchids[26]; Assam’s Flora[27]; Orchids of India[28] and specimens authentication done in CAL, Botanical Survey of India, Howrah, India. Specimens were identified with the help of literature and matched at the herbarium of department of Botany Guwahati University and BSI Shillong (Assam herbarium). Finally all the Voucher specimens have been deposited in the Botany department herbarium of Guwahati University. All the species were arranged systematically with botanical names, habitat, local distribution and flowering month. For ecological status, plot of 5mx5m quadrates for terrestrial and 10mx10m quadrates for epiphytic species was laid down diagonally in the field.

3. Results and Discussion

During recent field studies in the Dibrugarh district, 50 genera with 113 Orchid species diversity and distribution have been recorded from the regions. Of them, 29 species with 17 genera are terrestrial and the rest 84 species with 33 genera are epiphytic. The numbers of epiphytic are greater than terrestrial species. The total numbers of recorded species of each genus are 2 *Acampe* spp., 2 *Aerides* spp., 2 *Anoectochilus* spp., 9 *Bulbophyllum* spp., 2 *Calanthe* spp., 2 *Chrysoglossum* spp., 7 *Cleisostoma* spp., 2 *Coelogyne* spp., 3 *Cymbidium* spp., 13 *Dendrobium* spp., 10 *Eria* spp., 3 *Gastrochilus* spp., 2 *Liparis* spp., 2 *Lusia* spp., 2 *Malaxis* spp., 2 *Micropora* spp., 2 *Phaius* spp., 2 *Phalaenopsis* spp., 2 *Pholidota* spp., 2 *Podochilus* spp., 3 *Tainia* spp., 2 *Thelasis* spp., 3 *Thrixspermum* spp., 6 *Zeuxine* spp. and the rest single species distribution in the region (Table 1). Terrestrial Orchid species like *Goodyera procera* frequently found in marshy habitat. Epiphytic Orchid species like *Dendrobium*, *Eria* and *Bulbophyllum* found highest number of species diversity and wide distribution throughout the Dibrugarh district.

Some attractive Orchid species in the regions are *Aerides odoratum*, *A. roesa*, *Calanthe masuca*, *Cymbidium bicolor*, *C. dayanum*, *Dendrobium aphyllum*, *D. fimbriatum*, *D. lituiflorum*, *D. moschatum*, *D. nobile*, *D. sulcatum*, *D. transparens*, *Papilionanthe teres* etc. Following Orchid species are rare and high risk of threat in the regions are *Acanthephippium striatum*, *Anoectochilus brevilabris*, *Bulbophyllum spathulatum*, *Calanthe masuca*, *Cymbidium bicolor*, *C. dayanum*, *Dendrobium nobile*, *Eria paniculatum*, *Gastrophilus calceolaris*, *Phalaenopsis mannii* and *P. parishii*.

An epiphytic Orchid species *Thrixspermum acuminatissimum* is a new report for Assam and recollection for India after 120 years[29]; similarly other species viz., *Bulbophyllum ebulbum*, *Chrysoglossum erraticum*, *C. robinsonii*, *Cleisostoma linearilobulatum*, *C. simondii*, *Diploprora championii*, *Eria connata*, *E. ferruginea*, *E. pudica*, *Tainia waryana*, *Thelasis pygmaea*, *Thrixspermum pygmaeum*, *Taeniophyllum crepidiforme*, *Zeuxine clandestine* and *Z. glandulosa* are new record from Assam[30] and *Anoectochilus brevilabris*, *Bulbophyllum protractum*, *B. spathulatum*, *Calanthe lyroglossa*, *Ceratostylis sabulata*, *Podochilus khasianus*, *Tainia minor*, *Thelasis longifolia*, *Trichotosia velutina*, and *Tylostylis discolor* are new record from Upper Assam of North East India[31].

The present status of these Orchid species are common 35 spp., vulnerable 23 spp., threatened 2 spp., endangered 32 spp., critically endangered 12 spp. and the data deficient 9 spp. widely distributed throughout the regions. It is observed that maximum number of species falls in vulnerable, endangered and critically endangered status. Therefore, immediate conservative measures are necessary to save these species in natural habitat in the regions is very important at present.

Enumeration

Acampe Lindley

Acampe papillosa (Lindl.) Lindl., Fol. Orchid, 2, 1853; Chowdhery, Orch. Fl. Arunachal Prad. 41. 1998.

Flowers 1 cm across, yellow, slightly fragrant; sepals and petals yellow with reddish brown transverse stripes; lip white, slightly spotted with purple-red.

Habitat: Epiphyte on tree trunk.

Voucher specimen: Gogoi et al, 0226.

Flowering: November – December.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Vulnerable.

Acampe rigida (Buch.-Ham. ex J.E. Smith) P.F. Hunt in Kew Bull. 24: 98. 1970; Chowdhery, Orch. Fl. Arunachal Prad. 41, 1998; Mishra, Orch. India 280. 2007.

Flowers yellow with purplish brown transverse stripes; lip white, with purplish brown longitudinal stripes above.

Habitat: Epiphyte on tree trunks or large branches.

Voucher specimen: Gogoi et al, 0096.

Flowering: June – July.

Local distribution within Dibrugarh district: Jeypore, Jo-kai, Namdang, Telpani and Dihingmukh.

Present ecological status: Vulnerable.

Acanthephippium Blume

Acanthephippium striatum Lindl. in Bot. Reg. 45. 1838; Hook. f., Fl. Brit. India 5: 816. 1890; Chowdhery, Orch. Fl. Arunachal Prad. 43. 1998.

Flowers creamy white with parallel red venation, tubular, 3.5–4.5 cm across.

Habitat: Growing in shaded and humid places in dense forests, banks of streams.

Voucher specimen: Gogoi et al. 0233.

Flowering: June – July.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Critically Endangered.

Aerides Loureiro

Aerides odorata Lour., Fl. Cochinch. 2: 525. 1790; Hook. f. Fl. Brit. India, 6:47, 1890; Chowdhery, Orch. Fl. Arunachal Prad. 49. 1998.

Flowers white with purple blotches at the extremities, 2.2-2.5 cm across, fragrant.

Habitat: Epiphyte in lowland forest.

Voucher specimen: Gogoi et al, 0156.

Flowering : May-June.

Local distribution within Dibrugarh district: Jeypore, Jo-kai.

Present ecological status: Vulnerable.

Aerides rosea Lodd. ex. Lindl. & Paxt. Fl. Gard. 2: 109. 1852; Chowdhery, Orch. Fl. Arunachal Prad. 49. 1998; Mishra, Orch. India. 280. 2007.

Flowers fragrant, purplish-pink suffused with white, dark pink spotted, opening widely, about 2 cm across.

Habitat: Epiphyte in mixed deciduous forest and humid evergreen forest.

Voucher specimen: Gogoi et al, 0131.

Flowering: May

Local distribution within Dibrugarh district: Jeypore, Jo-kai, Namdang, Telpani and Dihingmukh.

Present ecological status: Vulnerable.

Agrostophyllum Blume

Agrostophyllum planicaule (Wall. ex Lindl.) Reichb. f. in W.G. Walpers, Ann. Bot. Syst. 6: 909. 1864. *Agrostophyllum khasianum* Griffith in Calcutta Jour. Nat. Hist. 4: 378, t. 19. 1844; Hook. f., Fl. Brit. India 5: 824. 1890; Chowdhery, Orch. Fl. Arunachal Prad. 53. 1998.

Flowers white, 6-8 mm. across.

Habitat: Epiphyte in mixed deciduous forest and humid evergreen forest.

Voucher specimen: Gogoi et al, 0132.

Flowering: August - October.

Local distribution within Dibrugarh district: Jeypore, Jo-kai, Namdang, Telpani and Dihingmukh.

Present ecological status: Common.

Anoectochilus Blume

Anoectochilus brevilabris Lindl. Gen. Sp. Orchid. 499. 1840; Hook. f., Fl. Brit. India 5: 824. 1890. *Anoectochilus sikkimensis* King & Pantl., J. Asiat. Soc. Bengal, Pt. 2, Nat. Hist. 65: 124 (1896).

Flowers pinkish, lip white, about 2.5 cm. long.

- Habitat: Terrestrial in dense humid evergreen forest.
 Voucher specimen: Gogoi et al, 0312.
- Flowering: April - June.
 Local distribution within Dibrugarh district: Jeypore.
 Present ecological status: Critically Endangered.
- Anoectochilus roxburghii** (Wall.) Lindl. in J.F. Royle, III. Bot. Himal. Mts.: 368. 1839.
 Flowers white or pinkish; lip white.
 Habitat: Terrestrial in dense humid evergreen forest.
 Voucher specimen: Gogoi et al. 0490.
 Flowering: July- August.
 Local distribution within Dibrugarh district: Jeypore.
 Present ecological status: Critically Endangered.
- Biermannia** King & Pantling
Biermannia bimaculata (King & Pantl.) King & Pantl. in Ann. Roy. Bot. Gard. Calcutta 8: 200. t. 267. 1898; Pradhan, Indian Orchid-II. 433. 1979; Chowdhery, Orch. Fl. Arunachal Prad. 53. 1998.
 Flowers 2-3, distichous, 1-1.2 cm across, white, sweet scented.
 Habitat: Epiphytic in dense humid evergreen forest.
 Voucher specimen: Gogoi et al, 0501.
 Flowering: April – May.
 Local distribution within Dibrugarh district: Jokai.
 Present ecological status: Critically Endangered.
- Bulbophyllum** Thouars
Bulbophyllum affine Lindl. Gen. Sp. Orchid. 48. 1830; Hook. f. Fl. Brit. India 5: 756. 1890; Chowdhery, Orch. Fl. Arunachal Prad. 87. 1998.
 Flowers white with pink lined, about 3 cm long, solitary.
 Habitat: Epiphyte in mixed deciduous forest and humid evergreen forest.
 Voucher specimen: Gogoi et al, 0098.
 Flowering: June- August.
 Local distribution within Dibrugarh district: Jeypore.
 Present ecological status: Vulnerable.
- Bulbophyllum andersonii** (Hook. f.) J.J. Smith in Bull. Jard. Bot. Buitenz. Ser. 2, 8: 22. 1912; Seidenf., Nots. Cirrhopetalum Lindl. 67. 1987; Chowdhery, Orch. Fl. Arunachal Prad. 92. 1998. *Cirrhopetalum andersonii* Hook. f., Fl. Brit. India 5: 777. 1890.
 Flowers 1.5 cm long; Sepals and petals whitish, densely spotted with purplish red; lip purple.
 Habitat: Epiphyte in mixed deciduous forest and humid evergreen forest.
 Voucher specimen: Gogoi et al. 0112.
 Flowering: October.
 Local distribution within Dibrugarh district: Jeypore.
 Present ecological status: Vulnerable.
- Bulbophyllum careyanum** (Hook. f.) Spreng., Syst. Veg. 3: 732. 1826; Hook. f., Fl. Brit. India 5: 760. 1890; Barua, Orch. Fl. Kamrup dist. 144. 2001.
 Flowers purplish-brown, 0.5-0.8cm. long.
 Habitat: Epiphyte on tree trunks in dense humid evergreen forest.
 Voucher specimen: Gogoi et al, 0176.
 Flowering: October- December.
- Local distribution within Dibrugarh district: Jeypore, Jokai, Namdang, Telpani and Dihingmukh.
 Present ecological status: Common.
- Bulbophyllum delitescens** Hance in Jour. Bot. 14: 44. 1867; Seidenf. Not. Cirrhopetalum Lindl. 215. 1987; Chowdhery, Orch. Fl. Arunachal Prad. 101. 1998.
 Flowers reddish-brown.
 Habitat: Epiphyte in dense humid evergreen forest near a waterfall
 Voucher specimen: Gogoi et al, 0301.
 Flowering: June-July.
 Local distribution within Dibrugarh district: Jeypore, Jokai, Namdang, Telpani and Dihingmukh.
 Present ecological status: Common.
- Bulbophyllum ebulbum** King & Pantl. In Jour. Asiatic Soc. Bengal 64: 334. 1895 et in Ann. Roy. Bot. Gard. Calcutta 8: 83, t. 115. 1898; Chowdhery, Orch. Fl. Arunachal Prad. 104. 1998; Pradhan, Indian Orchid- II: 428. 1979.
 Flowers pale-green, about 0.8 cm long.
 Habitat: Epiphyte on tree trunks in dense humid evergreen forest.
 Voucher specimen: Gogoi et al. 0492.
 Flowering: May- June.
 Local distribution within Dibrugarh district: Jeypore.
 Present ecological status: Data Deficient.
- Bulbophyllum odoratissimum** (J.E. Smith) Lindl. Gen. Sp. Orchid. 55. 1830; Hook. f., Fl. Brit. India 5: 758. 1890; Chowdhery, Orch. Fl. Arunachal Prad. 123. 1998.
 Flower 5-7 mm long, white, fragrant.
 Habitat: Epiphyte in dense humid evergreen forest near a waterfall
 Voucher specimen: Gogoi et al, 0256.
 Flowering: May-September.
 Local distribution within Dibrugarh district: Jeypore.
 Present ecological status: Vulnerable.
- Bulbophyllum ornatissimum** (Reichb. f.) J.J. Smith in Bull. Jard. Bot. Buitenz. Ser. 2, 8: 26. 1912; Hook. f. Fl. Brit. India 5: 773. 1890; Chowdhery, Orch. Fl. Arunachal Prad. 127. 1998.
 Flowers yellow, with brown tinge.
 Habitat: Growing epiphyte on evergreen forest.
 Voucher specimen: Gogoi et al. 0708.
 Flowering: June-October.
 Local distribution within Dibrugarh district: Jokai.
 Present ecological status: Critically Endangered.
- Bulbophyllum protractum** Hook. f. Fl. Brit. India, 5: 758. 1890; Pradhan, Indian Orchid - II: 409. 1979.
 Flowers pale yellow, 0.6 cm long.
 Habitat: Growing epiphyte on evergreen forest.
 Voucher specimen: Gogoi et al, 0491.
 Flowering: June- July.
 Local distribution within Dibrugarh district: Jeypore.
 Present ecological status: Vulnerable.
- Bulbophyllum spathulatum** (Rolfe ex. E. Cooper.) Seidenf. in Bot. Tidsskr. 65: 347. 1970; Chowdhery, Orch. Fl. Arunachal Prad. 146. 1998.
 Flowers rose red, deeply spotted, 1.6 cm long.

Habitat: Epiphytic in riverine forest and in secondary evergreen forest,

Voucher specimen: Gogoi et al, 0276.

Flowering: April.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Endangered.

Calanthe Robert Brown

Calanthe lyroglossa Rchb. f., Otia Bot. Hamburg. 1: 53. 1878; Seidenfaden, Opera Botanica 114: 99. 1992; Mishra, Orch. India 285. 2007.

Flowers small, yellow, turning black when dried.

Habitat: Terrestrial in damp places on riversides.

Voucher specimen: Gogoi et al, 0486.

Flowering: November-February.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Endangered.

Calanthe sylvatica (Thou.) Lindl., Gen. Sp. Orchid. Pl.: 250. 1833. *Calanthe masuca* (D. Don) Lindl., Gen. Sp. Orchid. 249. 1830; Hook. f., Fl. Brit. India 5: 850. 1890;

Flowers pale pinkish purple with purple lip sometimes flushed with orange.

Habitat: Terrestrial in damp places on riversides.

Voucher specimen: Gogoi et al, 0161.

Flowering: August – September.

Local distribution within Dibrugarh district: Jeypore, Jokai.

Present ecological status: Common.

Ceratostylis Blume

Ceratostylis sabulata Bl., Bijdr. 7: 206. 1825; Chowdhery, Orch. Fl. Arunachal Prad. 167. 1998; Mishra, Orch. India 286. 2007.

Flowers greenish yellow or yellow.

Habitat: Epiphyte on tree trunk in dense humid evergreen forest.

Voucher specimen: Gogoi et al, 0154.

Flowering: May – August.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Threatened.

Chrysoglossum Blume

Chrysoglossum ornatum Bl., Bjdr. 338. 1825. *Chrysoglossum erraticum* Hook. f. Fl. Brit. India 5: 784, 1890; Chowdhery, Orch. Fl. Arunachal Prad. 197. 1998.

Flowers 2 cm across, green with reddish brown spots; lip white or yellowish spotted with purple; column white.

Habitat: Shaded and humid places in forests.

Voucher specimen: Gogoi et al, 0252.

Flowering: August – October.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Endangered.

Chrysoglossum robinsonii Ridley in Jour. Fed. Mal. St. Mus. 5: 157. 1915; Chowdhery, Orch. Fl. Arunachal Prad. 197. 1998; Mishra, Orch. India 287. 2007.

Flowers 2 cm across; sepals and petals green; lip white; column yellow.

Habitat: Shaded and humid places in dense forests.

Voucher specimen: Gogoi et al, 0237.

Flowering: June – July.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Endangered.

Cleisocentron Bruhl

Cleisocentron pallens (Cathcart ex Lindl.) N. Pearce & P.J. Cribb, Edinburgh J. Bot. 58: 118. 2001. *Cleisocentron trichromum* (Reichb. f.) Bruhl, Guid. Orch. Sikkim 137. 1926; Chowdhery, Orch. Fl. Arunachal Prad. 199. 1998.

Flowers pinkish, 2.5-2.8 cm across; sepals and petals pale-straw coloured, with a middle pink band.

Habitat: Epiphytic on tree trunks evergreen forests.

Voucher specimen: Gogoi et al, 0230.

Flowering: June – July.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Common.

Cleisostoma Blume

Cleisostoma appendiculatum (Lindl.) Benth. & Hook. f. ex Jackson in Index Kew. 1: 555. 1895; Chowdhery, Orch. Fl. Arunachal Prad. 200. 1998; Barua, Orch. Fl. Kamrup dist. 104. 2001.

Flowers 1.5 cm across, sepals and petals buff with purple longitudinal lines.

Habitat: Epiphytic on tree trunks in evergreen forests.

Voucher specimen: Gogoi et al, 0230.

Flowering: August- October.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Endangered.

Cleisostoma filiforme (Lindl.) Garay in Bot. Mus. Leafl. Harvard Univ. 23(4): 171. 1972; Chowdhery, Orch. Fl. Arunachal Prad. 204. 1998; Pradhan, Indian Orchid-II: 509. 1979.

Flowers about 1.3 cm across; sepals and petals yellowish green, with purplish brown stripes; lip white with purple-red midlobe, column yellow.

Habitat: Epiphytic on tree trunks in evergreen forests.

Voucher specimen: Gogoi et al, 0494.

Flowering: April- June.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Endangered.

Cleisostoma linearilobatum (Seidenf. & Smitinand) Garay, Bot. Reg. 31, mise. 59. 1845; Hook. f., Fl. Brit. India, 6: 75. 1890; Mishra, Orch. India, 288, 2007.

Flowers small, yellow turning to brown with pinkish-white lip.

Habitat: Epiphytic on tree trunks in evergreen forests.

Voucher specimen: Gogoi et al, 0493.

Flowering: May-July.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Endangered.

Cleisostoma paniculatum (Ker-Gawl.) Garay in Bot. Mus. Leafl. Harvard Univ. 23(4): 173. 1972; Chowdhery, Orch. Fl. Arunachal Prad. 204. 1998; Mishra, Orch. India 288. 2007.

Flowers opening widely; sepals and petals yellowish green with purple blotches within; lip yellow.

Habitat: Epiphytic on tree trunks in evergreen forests.

Voucher specimen: Gogoi et al, 0707.

Flowering: September-February.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Endangered.

Cleisostoma racemiferum (Lindl.) Garay in Bot. Mus. Leafl. Harvard Univ. 23(4): 173. 1972; Chowdhery, Orch. Fl. Arunachal Prad. 204. 1998; Pradhan, Indian Orchid-II: 515. 1979.

Flowers 1 cm across; sepals and petals yellow with brownish red spots, lip white.

Habitat: Epiphytic on tree trunks in evergreen forests.

Voucher specimen: Gogoi et al, 0710.

Flowering: July- September.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Endangered.

Cleisostoma simondii (Gagnep.) Scidenf. In Dansk Bot. Arkiv 29(3): 66. 1975; Chowdhery, Orch. Fl. Arunachal Prad. 208. 1998; Pradhan, Indian Orchid-II: 510. 1979.

Flowers yellowish green with purple markings.

Habitat: Epiphyte on thick-barked tree trunks in evergreen and deciduous forest.

Voucher specimen: Gogoi et al, 0221.

Flowering: August- October.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Endangered.

Cleisostoma subulatum Bl., Bijdr. 363. 1825; Chowdhery, Orch. Fl. Arunachal Prad. 208. 1998; Pradhan, Indian Orchid-II: 514. 1979.

Flowers about 1 cm across, sepals and petals yellow with intra marginal brown bands, lip white at the base.

Habitat: Epiphyte on tree trunk in dense humid evergreen forest.

Voucher specimen: Gogoi et al, 0097.

Flowering: May – June.

Local distribution within Dibrugarh district: Jeypore, Jokai, Namdang, Telpani and Dihingmukh.

Present ecological status: Common.

Coelogyne Lindley

Coelogyne fimbriata Lindl., Edwards's Bot. Reg. 11: t. 868. 1825; Hook. f., Fl. Brit. India 5: 836. 1890.

Flowers 3-4 cm across, pale- yellow; sepals and petals yellowish; lip yellowish, fimbriate at margins, keels 3 brownish; lip and column base brownish.

Habitat: Epiphyte on tree trunk in dense humid evergreen forest.

Voucher specimen: Gogoi et al, 0709.

Flowering: October- December.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Endangered.

Coelogyne ovalis Lindl., Bot. Reg. 24: 91. Misc. 191. 1838; Hook. f. Fl. Brit. India 5: 836. 1890; Chowdhery, Orch. Fl. Arunachal Prad. 234. 1998.

Flowers greenish yellow, with purplish stripes on lip.

Habitat: Epiphyte on tree trunk in dense humid evergreen forest.

Voucher specimen: Gogoi et al, 0485.

Flowering: August- December.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Endangered.

Corymborkis Thouars

Corymborkis veratrifolia (Reinw.) Bl., Coll. Orchid. Arch. Ind. 125, tt. 42 & 43. 1859; Pradhan, Indian Orchid-I: 100. 1979; Chowdhery, Orch. Fl. Arunachal Prad. 246. 1998.

Flowers white, fragrant, not widely spreading, 3.2–3.8 cm long.

Habitat: Terrestrial at shade and in dense humid evergreen forest with undergrowth of tall herbs.

Voucher specimen: Gogoi et al, 0076.

Flowering: March – May.

Local distribution within Dibrugarh district: Jeypore, Jokai.

Present ecological status: Endangered.

Cymbidium Swartz

Cymbidium aloifolium (Lindl.) Sw. in Nova Acta Upsal. 2, 6: 73. 1799; Hook. f., Fl. Brit. India 6: 10. 1890; Chowdhery, Orch. Fl. Arunachal Prad. 253. 1998.

Flowers 4-5 cm across, slightly fragrant; sepals and petals pale yellow to cream-yellow, with a broad central maroon-brown stripe; lip cream-colored.

Habitat: Epiphyte on tree trunk in dense humid evergreen forest.

Voucher specimen: Gogoi et al, 0079.

Flowering: April – May;

Local distribution within Dibrugarh district: Jeypore, Jokai, Namdang, Telpani and Dihingmukh.

Present ecological status: Common.

Cymbidium bicolor Lindl., Gen. Sp. Orchid. 164. 1833; Hook. f., Fl. Brit. India 6: 10. 1890.

Flowers 3–4 cm across; sepals and petals yellow with a central purplish red longitudinal stripe; lip cream-yellow.

Habitat: Epiphyte on tree trunk in dense humid evergreen forest.

Voucher specimen: Gogoi et al, 0135.

Flowering: May – June.

Local distribution within Dibrugarh district: Jeypore, Jokai.

Present ecological status: Endangered.

Cymbidium dayanum Reichb. f. in Gard. Chron. 710. 1869; Chowdhery, Orch. Fl. Arunachal Prad., 256, 1998; Mishra, Orch. India, 290, 2007.

Flowers 4–5 cm across; sepals and petals white, with a central maroon stripe; lip maroon, tinged white at its base,

Habitat: Epiphyte on tree trunk in dense humid evergreen forest.

Voucher specimen: Gogoi et al, 0116.

Flowering: June – July.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Endangered.

Dendrobium Swartz

Dendrobium acinaciforme Roxb., Fl. Ind. 3: 487. 1832; Barua , Orch. Fl. Kamrup dist. 151. 2001; Chowdhery, Orch. Fl. Arunachal Prad. 283. 1998.

Flowers yellowish-white, about 1 cm long.

Habitat: Epiphyte on tree trunk in dense humid evergreen

forest.

Voucher specimen: Gogoi et al,0117.

Flowering: June - August.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Common.

Dendrobium aduncum Wall. in Bot. Reg. 1842, misc. 62, t. 15. 1846; Hook. f., Fl. Brit. India 5: 730. 1890; Chowdhery, Orch. Fl. Arunachal Prad. 283. 1998.

Flowers 1.2-2 cm across, pale purple; sepals and petals pale pink; lip white; column white.

Habitat: Epiphyte on a small tree trunk in dense humid evergreen forest.

Voucher specimen: Gogoi et al, 0078.

Flowering: May.

Local distribution within Dibrugarh district: Jeypore, Jokai.

Present ecological status: Endangered.

Dendrobium aphyllum (Roxb.) Fischer in Gamble, Fl. Pres. Madras 1416. 1928; Hook. f., Fl. Brit. India 5: 738. 1890; Chowdhery, Orch. Fl. Arunachal Prad. 287. 1998.

Flowers, pale rose, 4.5-5 cm across; lip yellow.

Habitat: Epiphyte in mixed deciduous forest or open forest.

Voucher specimen: Gogoi et al, 0077.

Flowering: April - May.

Local distribution within Dibrugarh district: Jeypore, Jokai, Namdang, Telpani and Dihingmukh.

Present ecological status: Common.

Dendrobium cathcartii Hook. f., Fl. Brit. India 5: 727. 1890, Chowdhery Orch. Fl. Arunachal Prad. 290. 1998.

Flowers greenish-yellow, 2cm across, fragrant; lip yellow with purple.

Habitat: Epiphyte on tree trunk in dense humid evergreen forest.

Voucher specimen: Gogoi et al, 0148.

Flowering: April - May.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Endangered.

Dendrobium cumulatum Lindl. in Gard. Chron. 756. 1855; Hook. f., Fl. Brit. India 5: 731. 1890; Chowdhery, Orch. Fl. Arunachal Prad. 295. 1998.

Flowers white with purple; lip white suffused with yellow.

Habitat: Epiphyte on tree trunk in forest along a small stream.

Voucher specimen: Gogoi et al, 0265.

Flowering: March – May.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Endangered.

Dendrobium fimbriatum Hook., Exot. Fl. t. 71. 1823; Hook. f., Fl. Brit. India 5: 745. 1890; Chowdhery, Orch. Fl. Arunachal Prad. 301. 1998.

Flowers 4-5 cm across, sepals and petals golden yellow; lip golden yellow, with or without maroon blotch.

Habitat: Epiphyte in mixed deciduous forest, also in humid evergreen forest.

Voucher specimen: Gogoi et al, 0101.

Flowering: March - May.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Vulnerable.

Dendrobium lituiflorum Lindl. in Gard. Chron. 372. 1856; Hook. Fl. Brit. India 5: 740. 1890; Chowdhery, Orch. Fl. Arunachal Prad. 308. 1998.

Flowers 4-5 cm. across, pale purple inner surface of lip with a deep purple spot surrounded by a white circle.

Habitat: Epiphytic on tree trunks in open forests.

Voucher specimen: Gogoi et al, 0057.

Flowering: April – May.

Local distribution within Dibrugarh district: Jeypore, Jokai, Namdang, Telpani and Dihingmukh.

Present ecological status: Common.

Dendrobium moschatum (Buch.-Ham.) Swartz in Schrad., Neu. Jour. Bot. 1: 94. 1805; Barua, Orch. Fl. Kamrup Dist. 159. 2001; Chowdhery, Orch. Fl. Arunachal Prad. 311. 1998.

Flower orange yellow, 5-7 cm across, deep yellow disk with a pale purplish brown blotch on either side.

Habitat: Epiphytic on tree trunks in open forests.

Voucher specimen: Gogoi et al, 0058.

Flowering: April - June.

Local distribution within Dibrugarh district: Jeypore, Jokai, Namdang, Telpani and Dihingmukh.

Present ecological status: Common.

Dendrobium nobile Lindl., Gen. Sp. Orchid. 79. 1830; Hook. f. Fl. Brit. India 5: 740. 1890; Chowdhery, Orch. Fl. Arunachal Prad. 314. 1998.

Flowers 5-7cm. across, white merging with purple at apex; lip purple at tip, at middle followed by deep purple central blotch.

Habitat: Epiphyte in humid evergreen forest, also in the lowlands.

Voucher specimen: Gogoi et al, 0346.

Flowering: April - May,

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Critically Endangered.

Dendrobium stuposum Lindl. in Bot. Reg. 52. 1838; Hook. f. Fl. Brit. India 6: 186. 1890; Chowdhery Orch. Fl. Arunachal Prad. 322. 1998.

Flowers small, white with a dull yellow spot on the lip.

Habitat: Epiphytic on tree trunks in open and mountain forests.

Voucher specimen: Gogoi et al, 0504.

Flowering: June- August.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Endangered.

Dendrobium sulcatum Lindl. in Bot. Reg. n. 5. 24: t. 65. 1838; Hook. f. Fl. Brit. India 5: 749. 1890; Chowdhery, Orch. Fl. Arunachal Prad. 322. 1998.

Flowers golden yellow, 2.5-3.5 cm across; lip with red-purple markings at base.

Habitat: Epiphytic on tree trunks in dense forests.

Voucher specimen: Gogoi et al, 0153.

Flowering: April-May.

- Local distribution within Dibrugarh district: Jeypore.
Present ecological status: Critically Endangered.
- Dendrobium terminale** Par. & Reichb. f. in Trans. Linn. Soc. 30: 149. 1859; Hook. f. Fl. Brit. India 5: 725. 1890; Chowdhry, Orch. Fl. Arunachal Prad. 193. 1998.
Flowers 1-1.2 cm long, white flushed pink.
Habitat: Epiphytic on tree trunks at forest.
Voucher specimen: Gogoi et al, 0203.
Flowering: April – June.
Local distribution within Dibrugarh district: Jeypore.
Present ecological status: Endangered.
- Dendrobium transparens** Wall. ex Lindl., Gen. Sp. Orchid. 79. 1830; Hook. f. Fl. Brit. India 5: 738. 1890; Chowdhry, Orch. Fl. Arunachal Prad. 327. 1998.
Flowers 4-5 cm across; sepals and petals white linged with purple at tips, lip white with large purple patch on the disc.
Habitat: Epiphytic on tree trunks at forest.
Voucher specimen: Gogoi et al, 0061.
Flowering: April – May.
Local distribution within Dibrugarh district: Jeypore, Jokai, Namdang, Telpani and Dihingmukh.
Present ecological status: Vulnerable.
- Didymoplexis** Griffith
Didymoplexis pallens Griff. in Calcutta Jour. Nat. Hist. 4: 383, t. 17. 1843; Hook. f., Fl. Brit. India 6: 122. 1890; Chowdhry, Orch. Fl. Arunachal Prad. 329. 1998.
Flowers white, 0.8 cm across.
Habitat: Terrestrial, growing in Bamboo forest.
Voucher specimen: Gogoi et al, 0198.
Flowering: May – June.
Local distribution within Dibrugarh district: Jeypore, Jokai.
Present ecological status: Vulnerable.
- Diploprora** Hook. f.
Diploprora championii (Lindl. ex Benth.) Hook. f., Fl. Brit. India 6: 26. 1890; Chowdhry, Orch. Fl. Arunachal Prad. 702. 1998.
Flower pale yellow, with white-rosy lip, 1 cm across.
Habitat: Growing epiphytic on branches of small trees in forests.
Voucher specimen: Gogoi et al, 00711.
Flowering: March - June.
Local distribution within Dibrugarh district: Jokai.
Present ecological status: Critically Endangered.
- Epipogium** Gmelin ex Borkhausen
Epipogium roseum (D. Don) Lindl. in Jour. Linn. Soc. 1: 177. 1857; Chowdhry, Orch. Fl. Arunachal Prad. 343. 1998; Mishra, Orch. India 296. 2007.
Flowers white with faint purple spots on lip.
Habitat: Terrestrial in evergreen forest.
Voucher specimen: Gogoi et al, 0712.
Flowering: October- December.
Local distribution within Dibrugarh district: Jeypore.
Present ecological status: Data Deficient.
- Eria** Lindley
Eria acervata Lindl. in Jour. Hort. Soc. 6: 57. 1851; Hook. f., Fl. Brit. India 5: 57. 1851; Chowdhry, Orch. Fl. Arun-
achal Prad. 350. 1998.
Flowers white, about 1.5 cm across.
Habitat: Epiphyte in dense humid evergreen forest.
Voucher specimen: Gogoi et al, 0501.
Flowering: May- July.
Local distribution within Dibrugarh district: Jeypore.
Present ecological status: Vulnerable.
- Eria amica** Reichb. f., Xen. Orchid. 2: 162, t. 168. f. 6-9. 1870; Hook. f., Fl. Brit. India 5: 800. 1890; Chowdhry, Orch. Fl. Arunachal Prad. 350. 1998.
Flowers pale-yellow, with reddish- brown nerves, about 1.2 cm across.
Habitat: Epiphyte in dense humid evergreen forest.
Voucher specimen: Gogoi et al, 0482.
Flowering: March- May.
Local distribution within Dibrugarh district: Jeypore.
Present ecological status: Threatened.
- Eria connata** Joseph, Hegde & Abbareddy in Bull. Bot. Surv. India 24: 114, f. 1-7. 1982; Chowdhry, Orch. Fl. Arunachal Prad. 361. 1998; Mishra, Orch. India 297. 2007.
Flowers creamy white, with yellow lip, about 0.5 cm across.
Habitat: Epiphyte in dense humid evergreen forest.
Voucher specimen: Gogoi et al, 0480.
Flowering: July- September.
Local distribution within Dibrugarh district: Jeypore.
Present ecological status: Data Deficient.
- Eria ferruginea** Lindl. in Bot. Reg. n.s. 25: t. 35. 1839; Hook. f., Fl. Brit. India 5: 804. 1890; Chowdhry, Orch. Fl. Arunachal Prad. 363. 1998.
Flowers pink, 2 cm across.
Habitat: Epiphyte in dense humid evergreen forest.
Voucher specimen: Gogoi et al, 0507.
Flowering: June- July.
Local distribution within Dibrugarh district: Jeypore.
Present ecological status: Data Deficient.
- Eria lasiopetala** (Willd.) Ormerod, Opera Bot. 124: 22. 1995. **Eria pubescens** (Hook. f.) Lindl. in Jour. Linn. Soc. 3: 54. 1858; Chowdhry, Orch. Fl. Arunachal Prad. 373. 1998; Barua, Orch. Fl. Kamrup Dist. 138. 2001.
Flowers yellow, tomentose, about 1.5 cm across.
Habitat: Epiphyte in humid evergreen forest, mixed deciduous forest.
Voucher specimen: Gogoi et al, 0065.
Flowering: March-April.
Local distribution within Dibrugarh district: Jeypore, Jokai, Namdang, Telpani and Dihingmukh.
Present ecological status: Common.
- Eria paniculata** Lindl. in Wall., Pl. Asiat. Rar. 1: 32, t. 36. 1830; Hook. f., Fl. Brit. India 5: 789. 1890; Chowdhry, Orch. Fl. Arunachal Prad. 373. 1998.
Flowers yellowish green.
Habitat: Epiphyte in dense humid evergreen forest.
Voucher specimen: Gogoi et al, 0225.
Flowering: December- March.
Local distribution within Dibrugarh district: Jeypore.
Present ecological status: Vulnerable.

Eria pannea Lindl. in Bot. Reg. 64. misc. 79. 1842; Hook. f. Fl. Brit. India 5: 804. 1890; Chowdhery, Orch. Fl. Arunachal Prad. 373. 1998.

Flowers pale yellow-green, lip dark purplish.

Habitat: Epiphyte in dense evergreen forest.

Voucher specimen: Gogoi et al, 0147.

Flowering: May - July.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Endangered.

Eria pudica Ridl. in Jour. Linn. Soc. 32: 294. 1896; Chowdhery, Orch. Fl. Arunachal Prad. 377. 1998; Mishra, Orch. India 298. 2007.

Flowers pinkish white, pubescent, buff with darker Strips.

Habitat: Epiphyte in deciduous forest and evergreen forest.

Voucher specimen: Gogoi et al, 0495.

Flowering: April- August.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Data Deficient.

Eria pumila Lindl. Gen. sp. Orchid 68. 1830; Hook. f. Fl. Brit. India 5: 791. 1890.

Flowers white, flushed with pink.

Habitat: Epiphyte in humid evergreen forest, mixed deciduous forest.

Flowering: January- March.

Voucher specimen: Gogoi et al, 0502.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Vulnerable.

Eria tomentosa (Koen.) Hook. f., Fl. Brit. India 5: 803. 1890; Chowdhery, Orch. Fl. Arunachal Prad. 385. 1998.

Flowers about 1.5 cm across, orange- yellow.

Habitat: Epiphyte in humid evergreen forest, mixed deciduous forest.

Voucher specimen: Gogoi et al, 0503.

Flowering: September- November.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Data Deficient.

Eulophia Robert Brown ex Lindley

Eulophia hormusjii Duthie in Ann. Roy. Bot. Gard. Calcutta 9: 125, t. 109. 1906; Chowdhery, Orch. Fl. Arunachal Prad. 393. 1998; Pradhan, Indian Orchid-II: 456. 1979.

Flowers brownish, 3-4 cm across.

Habitat: Terrestrial, growing on open and loose soil.

Voucher specimen: Gogoi et al, 0022.

Flowering: August-December.

Local distribution within Dibrugarh district: Jeypore, Dihingmukh.

Present ecological status: Common.

Flickingeria Hawkes

Flickingeria fugax (Reichb. f.) Seidenf. in Dansk Bot. Arkiv 34: 46. 1980; Kumar et. Monilal, Cat. Ind. Orch. 74. 1994; Chowdhery, Orch. Fl. Arunachal Prad. 399. 1998.

Flowers white, 3-3.5cm across, fugacious.

Habitat: Epiphyte in humid evergreen forest, mixed deciduous forest.

Voucher specimen: Gogoi et al, 0067.

Flowering: March – October.

Local distribution within Dibrugarh district: Jeypore, Jokai.

Present ecological status: Common.

Gastrochilus D. Don

Gastrochilus calceolaris (Buch.-Ham. ex. J.E. Smith) D. Don, Prodr. Fl. Nepal. 32. 1852; Kumar et. Monilal, Cat. Ind. Orch. 75. 1994; Chowdhery, Orch. Fl. Arunachal Prad. 413. 1998.

Flowers widely opening; sepals and petals yellow, with purplish brown markings; lip white with purple-red marks.

Habitat: Epiphyte in humid evergreen forest, mixed deciduous forest.

Voucher specimen: Gogoi et al, 0320.

Flowering: October – November.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Endangered.

Gastrochilus dasypogon (J.E. Smith) O. Ktze., Rev. Gen. Pl. 2: 661. 1891; Kumar et. Monilal, Cat. Ind. Orch. 75. 1994; Chowdhery, Orch. Fl. Arunachal Prad. 413 1998.

Flowers yellow with brownish-purple spots, 1.5-2 cm across.

Habitat: Epiphyte in humid evergreen forest, mixed deciduous forest.

Voucher specimen: Gogoi et al, 0130.

Flowering: October – November,

Local distribution within Dibrugarh district: Jeypore, Jokai, Namdang, Telpani and Dihingmukh.

Present ecological status: Common.

Gastrochilus inconspicuus (Hook. f.) O. Ktze., Rev. Gen. Pl. 2: 661. 1891; Kumar et. Monilal, Cat. Ind. Orch. 75. 1994; Chowdhery, Orch. Fl. Arunachal Prad. 413. 1998.

Flowers white or yellowish-green, 0.5cm across.

Habitat: Epiphyte in humid evergreen forest, mixed deciduous forest.

Voucher specimen: Gogoi et al, 0070.

Flowering: June - July.

Local distribution within Dibrugarh district: Jeypore, Jokai, Namdang, Telpani and Dihingmukh.

Present ecological status: Common.

Geodorum G. Jackson

Geodorum densiflorum (Lamk.) Schltr. in Fedde Report. Behi. 4: 259. 1919; Kumar et. Monilal, Cat. Ind. Orch. 75. 1994; Chowdhery, Orch. Fl. Arunachal Prad. 418. 1998.

Flowers white to pinkish, lip with a central yellow callus and crimson-purple venation and streaks.

Habitat: Terrestrial in evergreen forest, also in grass land.

Voucher specimen: Gogoi et al, 0238.

Flowering: June – July.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Vulnerable.

Goodyera Robert Brown

Goodyera procera (Wall. ex Ker- Gawl.) Hook., Exot. Fl. 1, 3: t. 39. 1823; Hook.f., Fl. Brit. India 6: 111. 1890; Chowdhery, Orch. Fl. Arunachal Prad. 431. 1998.

Flowers fragrant, opening weakly, white tinged pale green.

Habitat: Terrestrial at the bank of a small stream and in evergreen forest, also on rock in a stream.

Voucher specimen: Gogoi et al, 0205.

Flowering: April – June.

Local distribution within Dibrugarh district: Jeypore and Dihingmukh.

Present ecological status: Common.

Hetaeria Blume

Hetaeria affinis (Griff.) Seidenf. & Ormerod, Oasis, Suppl. 2: 9, 2001; Mishra, Orch. India, 304, 2007.

Flowers opening slightly, 5-6 mm across, green, tipped with pink; lip white.

Habitat: Terrestrial in secondary evergreen forest close to a small stream.

Voucher specimen: Gogoi et al, 0505.

Flowering: April- May.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Endangered.

Kingidium P. F. Hunt

Kingidium deliciosum (Reichb. f.) Sweet in Amer. Orchid Soc. Bull. 39: 1095. 1970; Mishra, Orch. India 304. 2007; Chowdhery, Orch. Fl. Arunachal Prad. 463. 1998.

Flowers greenish yellow; lip purple spotted.

Habitat: Epiphyte in gallery forest along a large river, in a shady spot in humid evergreen forest.

Voucher specimen: Gogoi et al, 0210.

Flowering: May – July.

Local distribution within Dibrugarh district: Jeypore, Jokai and Dihingmukh.

Present ecological status: Vulnerable.

Liparis L.C. Richard

Liparis mannii Reichb. f. in Flora 55: 275. 1872; Hook. f., Fl. Brit. India 5: 701. 1890; Chowdhery, Orch. Fl. Arunachal Prad. 479. 1998.

Flowers yellowish, 5 mm across.

Habitat: Epiphyte in humid evergreen forest.

Voucher specimen: Gogoi et al, 0124.

Flowering: November – January.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Endangered.

Liparis viridiflora (Bl.) Lindl., Gen. Sp. Orchid. 31. 1830; Hook.f., Fl. Brit. India 5: 704. 1890.

Flowers greenish white or pale greenish yellow.

Habitat: Epiphyte in humid evergreen forest and mixed deciduous forest.

Voucher specimen: Gogoi et al, 0073.

Flowering: April– May.

Local distribution within Dibrugarh district: Jeypore, Jokai, Namdang, Telpani and Dihingmukh.

Present ecological status: Common.

Luisia Gaudichaud

Luisia trichorhiza (Hook. f.) Bl. Mus. Bot. 1: 63. 1849; Hook. f., Fl. Brit. India 6: 23. 1890; Chowdhery, Orch. Fl. Arunachal Prad. 495. 1998.

Flowers purplish green with faint purple lines, about

1.5cm across.

Habitat: Epiphyte in humid evergreen forest, growing on exposed trees.

Voucher specimen: Gogoi et al, 0060.

Flowering: March – May.

Local distribution within Dibrugarh district: Jeypore, Jokai, Namdang, Telpani and Dihingmukh.

Present ecological status: Common.

Luisia zeylanica Lindl., Fol. Orchid. Luisia, 3. 1853; Chowdhery, Orch. Fl. Arunachal Prad. 501. 1998.

Flowers greenish yellow, with purple base.

Habitat: Epiphyte in humid evergreen forest, growing on exposed trees.

Voucher specimen: Gogoi et al, 0496.

Flowering: April- May.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Common.

Malaxis Soland ex Swartz

Malaxis acuminata D. Don, Prodr. Fl. Nepal 29. 1852; Chowdhery, Orch. Fl. Arunachal Prad. 502. 1998.

Flowers purplish red, 1.5 cm across.

Habitat: Terrestrial in dense humid evergreen forest on rocky terrain, also in the lowlands.

Voucher specimen: Gogoi et al, 0499.

Flowering: June – July.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Common.

Malaxis latifolia J.E. Smith in Rees, Cyclop. 22, no. 3. 1819; Pradhan, Indian Orchid-II: 208. 1979; Chowdhery, Orch. Fl. Arunachal Prad. 504. 1998.

Flowers pale purple, 0.5 cm across.

Habitat: Terrestrial in open humid evergreen forest.

Voucher specimen: Gogoi et al, 0200.

Flowering: May – June.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Common.

Micropora Lindley

Micropora mannii (Hook. f.) T. Tang & F.T. Wang in Acta Phytotax. Sin. 1(1): 94. 1951; Pradhan, Indian Orchid-II: 497. 1979; Chowdhery, Orch. Fl. Arunachal Prad. 512. 1998.

Flowers pale-pink, 0.6-0.7 cm across.

Habitat: Epiphyte on tree trunk in evergreen tropical forest.

Voucher specimen: Gogoi et al, 0324.

Flowering: June – July.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Vulnerable.

Micropora rostrata (Roxb.) Balakr. in Jour. Bombay Nat. Hist. Soc. 67: 66. 1970; Mishra, Orch. India 307. 2007; Chowdhery, Orch. Fl. Arunachal Prad. 512. 1998.

Flowers pale-purple, 1.5-2 cm across.

Habitat: Epiphyte on tree trunk in evergreen tropical forest.

Voucher specimen: Gogoi et al, 0312.

Flowering: April – May.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Vulnerable.

Nervilia Commers. ex Gaud.

Nervilia juliana (Roxb.) Schltr. in Engl. Bot. Jahrb. 45: 402. 1911; Mishra, Orch. India 308. 2007; Chowdhery, Orch. Fl. Arunachal Prad. 529. 1998.

Flowers purple-green, solitary; lip white, mottled with pink.

Habitat: Terrestrial, growing on open and loose soil.

Voucher specimen: Gogoi et al, 0047.

Flowering: May–July.

Local distribution within Dibrugarh district: Dihingmukh.

Present ecological status: Common.

Oberonia Lindley

Oberonia mucronata (D. Don) Ormerod & Seidenfaden in Seidenfaden, Contr. Orchid Fl. Thailand 13: 20. 1997; Mishra, Orch. India 309. 2007.

Flowers yellowish.

Habitat: Epiphyte on tree trunk in evergreen tropical forest.

Voucher specimen: Gogoi et al, 0055.

Flowering: September – October.

Local distribution within Dibrugarh district: Jeypore, Jokai, Namdang, Telpani and Dihingmukh.

Present ecological status: Common.

Papilionanthe Schlechter

Papilionanthe teres (Roxb.) Schltr. in Orchis 9: 78; 1915; Mishra, Orch. India 311. 2007; Chowdhery, Orch. Fl. Arunachal Prad. 570. 1998.

Flowers 5–10 cm across; sepals and petals white, tinged with pink or purplish; lip deep purple-red.

Habitat: Epiphyte in mixed deciduous forest, also on solitary roadside trees.

Voucher specimen: Gogoi et al, 0059.

Flowering: April – May.

Local distribution within Dibrugarh district: Jeypore, Jokai, Namdang, Telpani and Dihingmukh.

Present ecological status: Common.

Phaius Loureiro

Phaius mishmensis (Lindl. & Paxt.) Reichb. f. in Bonplandia 5: 43. 1857; Hook. f., Fl. Brit. India 5: 817. 1890; Mishra, Orch. India 313. 2007; Chowdhery, Orch. Fl. Arunachal Prad. 583. 1998.

Flowers 4–5 cm across, white, greenish yellow or pinkish purple.

Habitat: Terrestrial, on the bank of a small stream in dense humid evergreen forest.

Voucher specimen: Gogoi et al, 0484.

Flowering: November- January.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Critically Endangered.

Phaius tankervilleae (Banks ex I'Herit.) Bl., Mus. Bot. Lugd.- Bat. 2: 177. 1856; Mishra, Orch. India 313. 2007; Chowdhery, Orch. Fl. Arunachal Prad. 583. 1998.

Flowers 7–12 cm across; sepals and petals whitish outside, reddish brown or brown inside; lip white toward base, pink or red-pink toward entrance with white stripes on inside.

Habitat: Terrestrial, shaded and damp places in forests.

Voucher specimen: Gogoi et al, 0512.

Flowering: November– January.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Critically Endangered.

Phalaenopsis Blume

Phalaenopsis mannii Reichb. f. in Gard. Chron. 902. 1871; Hook. f., Fl. Brit. India, 6: 30, 1890; Chowdhery, Orch. Fl. Arunachal Prad., 587, 1998.

Flowers 3–4 cm across; sepals and petals yellow with dark brown spots and bars; lip mid-lobe white; column yellow.

Habitat: Epiphytic on tree trunks in evergreen forests.

Voucher specimen: Gogoi et al, 0344.

Flowering: March – May.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Critically Endangered.

Phalaenopsis parishii Reichb. f. in Gard. Chron. 410. 1865; Hook.f. Fl. Brit. India 6: 31. 1890; Chowdhery, Orch. Fl. Arunachal Prad. 587. 1998.

Flowers white with two chestnut bands on lip, 2 cm across.

Habitat: Epiphytic on tree trunks in open forests.

Voucher specimen: Gogoi et al, 0258.

Flowering: March – April.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Critically Endangered.

Pholidota Lindley ex. Hook. f.

Pholidota articulata Lindl. Gen. Sp. Orchid. 38,1833; Hook. f., Fl. Brit. India, 5: 844, 1890.

Flowers greenish white or white and slightly tinged with reddish, 5 mm.

Habitat: Epiphyte in dense humid evergreen forest close to a waterfall.

Voucher specimen: Gogoi et al, 0435.

Flowering: July – October.

Local distribution within Dibrugarh district: Jeypore, Jokai.

Present ecological status: Common.

Pholidota imbricata (Roxb.) Lindl. in Hook., Fl. Exot. 2: t. 138. 1825; Hook. f., Fl. Brit. India 5: 845. 1890; Chowdhery, Orch. Fl. Arunachal Prad. 589. 1998.

Flowers white, 5 mm across.

Habitat: Epiphyte.

Habitat: Epiphyte on tree humid evergreen forest.

Voucher specimen: Gogoi et al, 0106.

Flowering: June – August.

Local distribution within Dibrugarh district: Jeypore, Jokai, Namdang, Telpani and Dihingmukh.

Present ecological status: Common.

Podochilus Blume

Podochilus cultratus Lindl., Gen Sp. Orchid. 234. 1833; Hook. f., Fl. Brit. India 6: 80. 1890.

Flowers white, 5 mm long.

Habitat: Epiphyte on tree trunk in wet evergreen tropical forest.

Voucher specimen: Gogoi et al, 0497.

Flowering: April- May.

- Local distribution within Dibrugarh district: Jeypore.
Present ecological status: Common.
- Podochilus khasianus** Hook. f., Fl. Brit. India 6: 81. 1890; Chowdhery, Orch. Fl. Arunachal Prad. 616. 1998.
Flowers white, very small.
Habitat: Epiphyte on tree trunk in wet evergreen tropical forest.
Voucher specimen: Gogoi et al, 0400.
Flowering: June - August.
Local distribution within Dibrugarh district: Jeypore.
Present ecological status: Common.
- Pomatocalpa** Breda
Pomatocalpa undulatum (Reichb. f.) J.J. Smith in Nat. Tijdschr. Ned. Ind. 72: 107. 1912; Chowdhery, Orch. Fl. Arunachal Prad. 622. 1998; Mishra, Orch. India 315. 2007.
Flowers 8 mm across, yellow with purple blotched; lip with purple blotched.
Habitat: Epiphyte in the wet evergreen tropical forest.
Voucher specimen: Gogoi et al, 0498.
Flowering: March- May.
Local distribution within Dibrugarh district: Jeypore.
Present ecological status: Endangered.
- Pteroceras** Hasselt ex Hassk.
Pteroceras suaveolens (Roxb.) Holtt. in Kew Bull. 14: 271. 1960; Chowdhery, Orch. Fl. Arunachal Prad. 624. 1998.
Flower yellow with brownish spots, about 1.5 cm across; lip tip dark purple.
Habitat: Epiphyte in the wet evergreen tropical forest.
Voucher specimen: Gogoi et al, 0489.
Flowering: June – July.
Local distribution within Dibrugarh district: Jeypore.
Present ecological status: Vulnerable.
- Rhynchostylis** Blume
Rhynchostylis retusa (Lindl.) Bl., Bijdr. 286, t. 49. 1825; Hook. f., Fl. Brit. India 6: 32. 1890; Chowdhery, Orch. Fl. Arunachal Prad. 626. 1998.
Flowers 1.7–2.3 cm across; sepals and petals white and spotted with pink or pale purple; lip purplish pink, apex white.
Habitat: Epiphyte in the wet evergreen tropical forest.
Voucher specimen: Gogoi et al, 0049.
Flowering: May – June.
Local distribution within Dibrugarh district: Jeypore, Jo-kai, Namdang, Telpani and Dihingmukh.
Present ecological status: Common.
- Robiquetia** Gaudichaud
Robiquetia spathulata (Bl.) J.J. Smith in Nat. Tijdschr. Ned. Ind. 72: 115. 1912; Chowdhery, Orch. Fl. Arunachal Prad. 630. 1998; Mishra, Orch. India 315. 2007.
Flowers yellow with purplish brown spots and stripes.
Habitat: Epiphyte humid evergreen forest.
Voucher specimen: Gogoi et al, 0450.
Flowering: May – July.
Local distribution within Dibrugarh district: Jeypore, Jo-kai.
Present ecological status: Vulnerable.
- Taeniophyllum crepidiforme** (King & Pantl.) King & Pantl. in Ann. Roy. Bot. Gard. Calcutta 8: 245, t. 325. 1898; Chowdhery, Orch. Fl. Arunachal Prad. 656. 1998; Mishra, Orch. India 317. 2007.
Flowers minute, greenish white with purple tinge.
Habitat: Epiphyte in humid evergreen forest.
Voucher specimen: Gogoi et al, 0506.
Flowering: August- September.
Local distribution within Dibrugarh district: Jeypore.
Present ecological status: Data Deficient.
- Tainia** Blume
Tainia latifolia (Lindl.) Benth. ex. Hook. f., Fl. Brit. India 5: 820. 1890; Chowdhery, Orch. Fl. Arunachal Prad. 657. 1998.
Flowers 2 cm across, dark brown, lip yellow.
Habitat: Terrestrial in dense humid evergreen forest.
Voucher specimen: Gogoi et al, 0350.
Flowering: March – May.
Local distribution within Dibrugarh district: Jeypore.
Present ecological status: Endangered.
- Tainia minor** Hook. f. Fl. Brit. India 5: 821. 1890; Chowdhery, Orch. Fl. Arunachal Prad. 661. 1998.
Flowers 1.5 cm across, purplish brown with deep purple spots; lip white, tinged with purplish brown.
Habitat: Terrestrial in dense humid evergreen forest.
Voucher specimen: Gogoi et al, 0488.
Flowering: June- August.
Local distribution within Dibrugarh district: Jeypore.
Present ecological status: Endangered.
- Tainia waryana** (Hook. f.) J.J. Smith in Bull. Jard. Bot. Buitenz. 2, 8: 6. 1912; Pradhan, Indian Orchid-II: 242. 1979; Chowdhery, Orch. Fl. Arunachal Prad. 661. 1998.
Flowers greenish flushed with red, 3 cm across; lip white.
Habitat: Terrestrial in dense humid evergreen forest.
Voucher specimen: Gogoi et al, 0481.
Flowering: June - July.
Local distribution within Dibrugarh district: Jeypore.
Present ecological status: Endangered.
- Thelasis** Blume
Thelasis longifolia Hook. f., Fl. Brit. India 6: 87. 1890; Chowdhery, Orch. Fl. Arunachal Prad. 662. 1998.
Flowers green, not opening widely, small.
Habitat: Epiphytic in evergreen forest.
Voucher specimen: Gogoi et al, 0355.
Flowering: June – August.
Local distribution within Dibrugarh district: Jeypore.
Present ecological status: Vulnerable.
- Thelasis pygmaea** (Griff.) Lindl. in Jour. Proc. Linn. Soc. 3: 63. 1859; Hook. f., Fl. Brit. India 6: 86. 1890; Chowdhery, Orch. Fl. Arunachal Prad. 662. 1998.
Flowers yellowish green, not opening widely, small.
Habitat: Epiphytic in mixed deciduous and evergreen forest.
Voucher specimen: Gogoi et al, 0487.
Flowering: July- September.
Local distribution within Dibrugarh district: Jeypore.
Present ecological status: Data Deficient.

Thrixspermum Loureiro

Thrixspermum acuminatissimum (Bl.) Reich. f. Xen. Orchid. 2: 121. 1867; Scidenfaden et al, Orchid. Thailand iv-I: 518. 1962.

Flowers yellow; lip white with yellow and reddish-brown spots.

Habitat: Growing on lateral branches of lower canopy of host tree, cool and shady place.

Voucher specimen: Gogoi et al, 0510.

Flowering: July- December.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Critically Endangered.

Thrixspermum centipeda Lour., Fl. Cochinch. 520. 1790; Chowdhery, Orch. Fl. Arunachal Prad. 665. 1998; Chowdhery & Pal, Orch. Arunachal Prad. 140. 1997.

Flowers white or creamy yellow, turning yellow later.

Habitat: Epiphyte in mixed deciduous forest, in humid evergreen forest.

Voucher specimen: Gogoi et al, 0430.

Flowering: May – August.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Endangered.

Thrixspermum pygmaeum (King & Pantling) Holtt. in Kew Bull. 14: 275. 1960; Chowdhery, Orch. Fl. Arunachal Prad. 666. 1998; Mishra, Orch. India 318. 2007.

Flowers about 1 cm across, white.

Habitat: Epiphyte in mixed deciduous forest, in humid evergreen forest.

Voucher specimen: Gogoi et al, 0714.

Flowering: May – August.

Local distribution within Dibrugarh district:

Present ecological status: Data Deficient.

Trichotosia Blume

Trichotosia velutina (Lodd. ex Lindl.) Kranzlin in Engler & Prantl, Pflanzenr. 50: 140. 1911; Chowdhery, Orch. Fl. Arunachal Prad. 672. 1998; Mishra, Orch. India 318. 2007.

Flowers pale- white, 1 cm across.

Habitat: Epiphyte on tree trunks in humid forest.

Voucher specimen: Gogoi et al, 0391.

Flowering: August – September.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Common.

Tropidia Lindley

Tropidia curculigoides Lindl., Gen. Sp. Orchid. 497. 1840; Chowdhery, Orch. Fl. Arunachal Prad. 676. 1998.

Flowers greenish white, 1.5 cm long.

Habitat: Terrestrial in dense humid evergreen forest and evergreen montane forest.

Voucher specimen: Gogoi et al, 0479.

Flowering: September- November.

Local distribution within Dibrugarh district: Jeypore, Jokai.

Present ecological status: Common.

Tylostylis Blume

Tylostylis discolour (Lindl.) Hook. f. in Ann. Roy. Bot. Gard. Calcutta 5: 22. 1895; Pradhan, Indian Orchid-II: 344.

1979; Chowdhery, Orch. Fl. Arunachal Prad. 677. 1998.

Flowers greenish yellow, 1.2–1.5 cm across.

Habitat: Epiphytic on trees in mixed forests.

Voucher specimen: Gogoi et al, 0201.

Flowering: January - March.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Common.

Zeuxine Lindley

Zeuxine clandestina Bl., Coll. Orchid. 70. 1858; Barua, Orch. fl. Kamrup Dist. 56. 2001; Mishra, Orch. India 320. 2007.

Flowers greenish-white.

Habitat: Growing in dense forest, cool and shady place.

Voucher specimen: Gogoi et al, 0508.

Flowering: Junuary- March.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Endangered.

Zeuxine glandulosa King & Pantling in Ann. Roy. Bot. Gard. (Calcutta) 8: 288. t. 384. 1898; Pradhan, Indian Orchid-I: 118. 1969; Mishra, Orch. India 320. 2007.

Flowers 0.5 cm long olivaceous green, column and central contracted part of lip white.

Habitat: Growing in dense forest, cool and shady place.-

Voucher specimen: Gogoi et al, 0511.

Flowering: March- April.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Endangered.

Zeuxine goodyeroides Lindl. Gen. Sp. Orchid. 486. 1840; Hook. f., Fl. Brit. India 6: 107. 1890.

Flowers resupinate, white, small.

Habitat: Growing in dense forest, cool and shady place.-

Voucher specimen: Gogoi et al, 0483.

Flowering: Junuary- February.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Common.

Zeuxine longilabris (Lindl.) Trim. in Joour. Ceylon Br. Roy Asiat. Soc. 9: 90. 1885; Hook. f., Fl. Brit. India 6: 107. 1890; Chowdhery, Orch. Fl. Arunachal Prad. 695. 1998.

Flowers greenish-white, small.

Habitat: Terrestrial, growing in grass land.

Voucher specimen: Gogoi et al, 0509

Flowering: March - May.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Endangered.

Zeuxine nervosa (Wall. ex Lindl.) Benth. ex Trimen, J. Ceylon Branch Roy. Asiat. Soc. 9: 90 (1885).

Flowers resupinate, white, small.

Habitat: Damp places in forests.

Voucher specimen: Gogoi et al, 0713.

Flowering: January-March.

Local distribution within Dibrugarh district: Jeypore.

Present ecological status: Vulnerable.

Zeuxine strateumatica (Lindl.) Schlechter in Engler, Bot. Jahrb. 45: 394. 1911; Chowdhery, Orch. Fl. Arunachal Prad. 695. 1998; Barua, Orch. fl. Kamrup Dist. 54. 2001.

Table 1. Number of Orchid species distribution in India, Assam and Dibrugarh district

Sl. No.	Orchid species	India	Assam	Dibrugarh district of Assam
1	<i>Acampe Lindl.</i>	6 species	3 species	2 species
2	<i>Acanthephippium Bl.</i>	3 species	2 species	1 species
3	<i>Aerides Lour.</i>	10 species	5 species	2 species
4	<i>Agrostophyllum Bl.</i>	About 4 species	1 species	1 species
5	<i>Anoectochilus Bl.</i>	16 species	3 species	2 species
6	<i>Biermannia King & Pantl.</i>	2 species	1 species	1 species
7	<i>Bulbophyllum Thou.</i>	About 100 species	24 species	9 species
8	<i>Calanthe R. Br.</i>	About 23 species	9 species	2 species
9	<i>Ceratostylis Bl.</i>	1 species	1 species	1 species
10	<i>Chrysoglossum Bl.</i>	About 6 species	3 species	2 species
11	<i>Cleisocentron Brühl</i>	1 species	1 species	1 species
12	<i>Cleisostoma Bl.</i>	About 19 species	10 species	7 species
13	<i>Coelogyne Lindl.</i>	43 species	15 species	2 species
14	<i>Corymborkis Thou.</i>	1 species	1 species	1 species
15	<i>Cymbidium Sw.</i>	30 species	12 species	3 species
16	<i>Dendrobium Sw.</i>	102 species	20 species	13 species
17	<i>Didymoplexis Griff.</i>	About 2 species	1 species	1 species
18	<i>Diploprora Hook. f.</i>	2 species	1 species	1 species
19	<i>Epipogium Gmelin ex Borkhausen</i>	6 species	1 species	1 species
20	<i>Eria Lindl.</i>	59 species	10 species	10 species
21	<i>Eulophia R. Br. ex Lindl.</i>	About 32 species	9 species	1 species
22	<i>Gastrochilus D. Don</i>	About 12 species	3 species	3 species
23	<i>Geodorum G. Jackson</i>	1 species	1 species	1 species
24	<i>Flickingeria Hawkes</i>	About 7 species	2 species	1 species
25	<i>Goodyera R. Br.</i>	17 species	4 species	1 species
26	<i>Hetaeria Bl.</i>	6 species	2 species	1 species
27	<i>Kingidium P.F. Hunt</i>	2 species	2 species	1 species
28	<i>Liparis L.C. Richard</i>	45 species	9 species	2 species
29	<i>Luisia Gaud.</i>	16 species	5 species	2 species
30	<i>Malaxis Soland. ex Sw.</i>	19 species	3 species	2 species
31	<i>Micropora Lindl.</i>	3 species	3 species	2 species
32	<i>Nervilia Commers. ex Gaud.</i>	14 species	3 species	1 species
33	<i>Oberonia Lindl.</i>	50 species	13 species	1 species
34	<i>Papilionanthe Schltr.</i>	4 species	2 species	1 species
35	<i>Phaius Lour.</i>	7 species	4 species	2 species
36	<i>Phalaenopsis Bl.</i>	7 species	4 species	2 species
37	<i>Pholidota Lindl. ex. Hook. f.</i>	10 species	7 species	2 species
38	<i>Podochilus Bl.</i>	4 species	2 species	2 species
39	<i>Pomatocalpa Breda, Kuhl & Hasselt</i>	8 species	1 species	1 species
40	<i>Pteroceras Hasselt ex Hassk.</i>	5 species	1 species	1 species
41	<i>Rhynchostylis Bl.</i>	2 species	2 species	1 species
42	<i>Robiquetia Gaud.</i>	4 species	2 species	1 species
43	<i>Taeniophyllum Bl.</i>	7 species	2 species	1 species
44	<i>Tainia Bl.</i>	9 species	3 species	3 species
45	<i>Thelasis Bl.</i>	4 species	2 species	2 species
46	<i>Thrixspermum Lour.</i>	9 species	6 species	3 species
47	<i>Trichotosia Bl.</i>	3 species	1 species	1 species
48	<i>Tropidia Lindl.</i>	3 species	2 species	1 species
49	<i>Tylostylis Bl.</i>	1 species	1 species	1 species
50	<i>Zeuxine Lindl.</i>	19 species	11 species	6 species

Flowers small, resupinate, white, lip pale yellow to yellow.

Habitat: Terrestrial, growing in grass land.

Voucher specimen: Gogoi et al, 0024.

Flowering: January-March.

Local distribution within Dibrugarh district: Namdang, Telpani and Dihingmukh.

Present ecological status: Common.

4. Conclusions

The agroclimatic condition of Dibrugarh district of Assam of North East India is most congenial to the lavish growth and development of wide varieties of Orchid species in

natural habitat. Nevertheless, whole Orchidaceous family facing high risk of threat because of regular and rapid destruction of natural habitat by deforestation, upper layer soil erosion, overgrazing, effects of herbicides which is harmful for many saprophytic and terrestrial species and increase of agricultural lands by clearing forest, developmental schemes, rapid urbanization, ignorance and finally indiscriminate collection for floral business cause greater harm in the natural population of the species in the regions. Many species are in rare, vulnerable, threatened, endangered and critically endangered in the region. It is observed that high risk of extinction is possible in the near future if habitat of these species are not conserved in proper ways. Therefore, conservation of natural habitat is urgently necessary by means of conduction village level awareness programs by government departments and NGOs with constant affiliation with department of forest and wildlife in the regions is the only solution to save our praiseworthy Orchid diversity resources of Dibrugarh district is vanish for ever from nature.

ACKNOWLEDGEMENTS

The authors grateful to Department of forest- Dibrugarh, Assam for constant supervision and valuable suggestions during the course of present studies.

REFERENCES

- [1] Barua, I.C, Orchid Flora of KamrupDistrict. Bishen Singh Mahendra Pal Singh, Dehra Dun India, 2001
- [2] Champion, H.G. Seth, S.K, A revised study of the forest type of India, Govt. Of India Press, Nasik, India, 1968
- [3] Jain, S.K. Rao, R.R, A Handbook of Field & Herbarium methods. Today & Tomorrow's Printers & Publishers, New Delhi, 1977
- [4] Lindley, J, The genera and species of Orchidaceous plants. London, 1830-1840
- [5] Lindley, J, Folia Orchidacea –An enumeration of the known species of Orchids, London, 1852-1855
- [6] Lindley, J, Contributions to the Orchidology of India-I.in: Journal of Linnean Society. 1857.1: 170– 190
- [7] Lindley, J, Contributions to the Orchidology of India-II.in: Journal of Linnean Society, 1859, 3: 1-63
- [8] King, G. Pantling R. The Orchids of the Sikkim Himalayas. Annals of the Royal Botanical Garden Calcutta 8: 1898, 1-342
- [9] Augustine, J., Kumar, Y. Sharma, J, *Orchids of India-II: Biodiversity and Status of Bulbophyllum Thou.* Daya Publishing House, Delhi, India, 2001
- [10] Bruhl, Paul, A Guide to the Orchid of Sikkim. Thacker & Spink & Co., Simla, India, 1926
- [11] Seidenfaden, G, The Orchids of Thailand, Vol.I- IV. The Siam Society, Bangkok, 1962
- [12] Deva, Som. Nathani, H. B, The Orchid Flora of North-West Himalaya. Bishen Singh Mahendra Pal Singh, Dehra Dun, India, 1968
- [13] Seidenfaden, G, Notes on Cirrhopetalum Lindl.In Dansk Bot. Arkiv, 1973, 29(1): 1-260
- [14] Pradhan, U.C, Indian Orchids Guide to Identificationand Culture. Bharat Lithographing Co.Calcutta, India. Vol- I, 1976
- [15] Pradhan, U.C, Indian Orchids Guide to Identificationand Culture. Thomson Prass, Faridabad, India. Vol- II, 1979
- [16] Raizada, M.B., H.B. Naithani. H.O. Saxena, Orchids of Mussoorie. Bishen Singh Mahendra Pal Singh, Dehra Dun, India, 1981
- [17] Hegde, S.N, Orchids of Arunachal Pradesh. Govt. of Arunachal Pradesh,Itanagar,India, 1984
- [18] Hooker, J.D, Orchidaceae. In: Flora of British India. L.Reeve and Co., Ashford, Kent. V: 687 – 864 & VI: 1890, 1 – 198
- [19] Pangtey, Y.P. S., S. S. Samant, G.S. Rawat, Orchids of Ku-maun Himalaya. Bishen SinghMahendra Pal Singh, Dehra Dun, India, 1991
- [20] Seidenfaden, G, The Orchids of Indochina. Opera Bot. 1992, 114: 1-501
- [21] Kumar, Sathish. Manilal, K.S, A Catalogue of Indian Orchids. Bishen Singh Mahendra Pal Singh, Dehra Dun, India, 1994
- [22] Deorani, S.C. Naithani, H.B, Orchids of Nagaland. Oriental Enterprises, Dehra Dun, India, 1995
- [23] Seidenfaden, G, Contribution to the orchid flora of Thailand XIII. Olsen & Olsen, Fredensborg, 1997
- [24] Chowdhery, H.J. Pal, G.D, Orchidaceae of Arunachal Pradesh. Bishen Singh Mahendra Pal Singh, Dehra Dun, India, 1997
- [25] Chowdhery, H.J, Orchid Flora of Arunachal Pradesh. Bishen Singh Mahendra Pal Singh, Dehra Dun, India,1998
- [26] Pradhan, M, 100 Sikkim Himalayan Orchids, Mumbai, India, 2004
- [27] Chowdhery, S, Assam's Flora. Assam Science Technology and Environment Council, Guwahati, Assam, India, 2005
- [28] Misra, S, Orchids of India. Bishen Singh Mahendra Pal Singh, Dehra Dun, India, 2007.
- [29] Gogoi, K.; R. L. Borah & G. C. Sharma, Orchid flora of Joypur Reserve Forest of Dibrugarh district of Assam, India, in: Pleione, 2009, 3(2): 135-147.
- [30] Gogoi, K., Borah R.L. Sharma, G.C, Additions to the Orchid flora of Joypur Reserve Forest in Dibrugarh district of Assam, India in: Pleione, 2011, 5 (1): 65-70
- [31] Borah, R. L., Gogoi, K. & Sharma, G. C. A Taxonomic Survey of the Orchid Diversity of Jokai Reserve Forest of Di-brugarh District of Assam, India. Journal of Non- Timber Forest Products, 2010, 17(1): 19-31.