

Species Datasheet

Datasheet No. A-061.048.009
(family.genus.species)

DBT-1

1. Taxon:

Species: *Dendrobiumaphyllum* (Roxb.) C.E.C.Fisch.

Subspecies:

Variety:

Cultivar

Hybrid

Image file

2. Synonyms:

[*Callistaaphylla* \(Roxb.\) Kuntze](#)

[*Cymbidiumaphyllum* \(Roxb.\) Sw.](#)

[*Dendrobiumaphyllum* var. *cucullatum* \(R.Br.\) P.K.Sarkar](#)

[*Dendrobiumaphyllum* var. *katakianum* I.Barua](#)

[*Dendrobiumcucullatum* R.Br.](#)

[*Dendrobiummadrasense* A.D.Hawkes \[Illegitimate\]](#)

[*Dendrobiumoxyphyllum* Gagnep.](#)

[*Dendrobiumpierardii* Roxb. ex Hook.](#)

[*Epidendrumaphyllum* \(Roxb.\) Poir.](#)

[*Limodorumaphyllum* Roxb.](#)

[*Pierardiabicolor* Raf. \[Illegitimate\]](#)

3. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Monocots
- Order: Asparagales Link.
- Family: Orchidaceae Juss.
- Subfamily: Epidendroideae
- Tribe: Malaxidinae
- Subtribe: Dendrobiinae
- Genus: *Dendrobium* Sw.
- Species: *Dendrobium aphyllum* (Roxb.) C.E.C.Fisch.

Bentham and Hooker (1862)

Kingdom: Plantae
Division: Phanerogamia
Class: Monocotyledonae
Series: Microspermae
Ordo: Orchideae
Tribus: Epidendreae
Subtribus: Dendrobieae
Genus: *Dendrobium* Sw.
Species: *Dendrobium aphyllum* (Roxb.) C.E.C.Fisch.

4. Distribution:

Global: India, Bhutan, China, India, Malaysia; Myanmar, Nepal, Thailand, Vietnam,

India: Assam, Manipur, Meghalaya, Mizoram, Nagaland, Arunachal Pradesh, Sikkim, West Bengal, Odisha, Chhattisgarh, Madhya Pradesh, Andaman & Nicobar Islands.

5.Indigenous/Exotic/Endemic;Cultivated/Wild:Indigenous, wild

6.Threat Status:

IUCN:Least Concern [ver 3.1](#)

BSI:

7.Habit and Habitat:Grows as epiphyte at 1500-1700m in Kumaon hills epiphyte or lithophyte

8.Life Form: Phanerophyte

9.Economic Importance:Cultivated ornamental

10. Probable Progenitor of:

11.DNA

C-value Methodology

2C (6.72 pg)⁴⁰ Feulgen Microdensitometry⁴⁰

12.Basic chromosome number(s): $x=19^{4, 6, 9, 12, 14, 18, 19, 26, 27, 32, 33, 34, 37, 38, 40, 42, 43, 47, 54, 55, 62}$,
 $20^{6, 8, 41}$

13. Zygotic chromosome number(s): $2n=38^{4, 6, 9, 12, 14, 18, 19, 26, 32, 37, 40, 42, 43, 47, 54, 55, 62}$,
 $40^{6, 8, 41}$

14. Gametic chromosome number(s): $n=19^{12, 27, 33, 34, 37, 38, 42, 43, 47, 62}$

15.Specialized chromosomes (B chromosomes/Sex chromosomes/Polytene chromosomes/Neocentric chromosomes):

Image file

16.Ploidy level:Diploid^{4, 6, 8, 9, 12, 14, 18, 19, 26, 27, 32, 33, 34, 37, 38, 40, 41, 42, 43, 47, 54, 55, 62}
Image file

17.Agametoploidy:

18.Nature of polyploidy (auto, segmental, allo, autoallo):

19.Genomic formula:

20. Aberrant chromosome number(s) (aneuploidy, aneusomy, polysomy):

21. Somatic chromosomes:^{4,42, 46, 47}

Karyotype Median, submedian^{4,42, 46, 47}

Chromosome size Small^{4,42, 46, 47}

NOR chromosome(s)^{4⁴², 2⁴}

Degree of asymmetry Symmetrical^{4,42, 46, 47}

Image file

22. Banding pattern(s):

Image file

23. Physical mapping of chromosomes:

In situ hybridization

Image file

Fluorescent in situ hybridization: Repetitive DNA probes DmoO11, DmoO14, DmoO22 (telomeric), 18S-5.8S-25S, 5S rRNA genes⁴

Image file

24. Genomic in situ hybridization:

Image file

25. Linkage map:

Image file

26. Chromosome associations:

Female meiosis

Male meiosis 19II⁴⁷

Image file

27. Chromosome distribution at anaphase I:

28. Genetic diversity:

Chromosomal level

Image file

DNA level

29. Any other information (Apomixis; Inversion; Male sterility; Pollen grain mitosis; Pollen stainability; Translocation etc.):