

Species Datasheet

Datasheet No. A-061.048.037
(family.genus.species)

DBT-1

1. Taxon:

Species: *Dendrobium nobile* Lindl.

Subspecies:

Variety:

Cultivar

Hybrid

Image file

2. Synonyms:

Callistanobilis (Lindl.) Kuntze

Dendrobium coerulescens Wall. ex Lindl.

Dendrobium formosanum (Rchb.f.) Masam.

Dendrobium lindleyanum Griff.

Dendrobium nobile var. *alboluteum* Huyen & Aver.

Dendrobium nobile var. *formosanum* Rchb.f.

Dendrobium nobile var. *nobilius* Rchb.f.

Dendrobium nobile f. *nobilius* (Rchb.f.) M. Hiroe

Dendrobium nobile var. *nobilis* Burb.

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 nobile* Lindl.

Bentham and Hooker (1862)

Kingdom: Plantae
Division: Phanerogamia
Class: Monocotyledonae
Series: Microspermae
Ordo: Orchideae
Tribus: Epidendreae
Subtribus: Dendrobieae
Genus: *Dendrobium* Sw.
Species: *Dendrobium nobile* Lindl.

4. Distribution:

Global: China, Himalayas, India, Bangladesh, Nepal, Bhutan Myanmar, Thailand, Laos, Vietnam

India: Assam, Manipur, Meghalaya, Mizoram, Nagaland, Arunachal Pradesh, Sikkim, West Bengal

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

6.Threat Status:

IUCN:

BSI:

7.Habit and Habitat: Cool to hot growing epiphyte or lithophyte

8.Life Form: Phanerophyte

9.Economic Importance:Cultivated ornamental, medicinal (Chinese herb), stem powder used as tonic in thirst and dryness of tongue

10. Probable Progenitor of:

11.DNA

C-value Methodology

12.Basic chromosome number(s): $x=19^3, 9, 12, 14, 19, 24, 26, 46, 47, 54, 55, 20^6, 25, 42$

13. Zygotic chromosome number(s): $2n=38^3, 9, 12, 14, 19, 24, 26, 46, 47, 54, 55,$

$40^6, 25, 42,$

$57^{18},$

76^{17}

14. Gametic chromosome number(s): $n=19^{47}$

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

Image file

16.Ploidy level:Diploid^{3, 6, 9, 12, 14, 19, 24, 25, 26, 42, 46, 47, 54, 55}

Triploid¹⁸

Tetraploid¹⁷

Image file

17.Agametoploidy:

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

19.Genomic formula:

20. Aberrant chromosome number(s) (aneuploidy, aneusomaty, polysomaty):

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

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

Chromosome size Small^{42, 46, 47}

NOR chromosome(s) 4⁴² Sau, H. & A. K. Sharma. 1983

Degree of asymmetry Symmetrical^{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:

Image file

24. Genomic in situ hybridization:

Image file

25. Linkage map:

Image file

26. Chromosome associations:

Female meiosis

Male meiosis

Image file

27. Chromosome distribution at anaphase I:

28. Genetic diversity:

Chromosomal level

Image file

DNA level⁵

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

