

Species Datasheet

Datasheet No. A-061.048.050
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species: *Dendrobium polyanthum* Wall. ex Lindl.

Subspecies:

Variety:

Cultivar

Hybrid

Image file

2. Synonyms:

Callistacretacea (Lindl.) Kuntze

Callistaprimulina (Lindl.) Kuntze

Dendrobium cretaceum Lindl.

Dendrobium nobile var. *pallidiflorum* Hook.

Dendrobium primulinum Lindl.

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 polyanthum* Wall. ex Lindl.

Bentham and Hooker (1862)

Kingdom: Plantae

Division: Phanerogamia

Class: Monocotyledonae

Series: Microspermae

Ordo: Orchideae

Tribus: Epidendreae

Subtribus: Dendrobieae

Genus: *Dendrobium* Sw.

Species: *Dendrobium polyanthum* Wall. ex Lindl.

4. Distribution:

Global: China South-Central, India, Laos, Myanmar, Nepal, Thailand, Vietnam, West Himalaya

India: Andaman and Nicobar Islands

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

6. Threat Status:

IUCN:

BSI:

7.Habit and Habitat:Grows as deciduous epiphyte in Kumaon hill at 1000m

8.Life Form: Phanerophyte

9.Economic Importance:Cultivated ornamental

10. Probable Progenitor of:

11.DNA

C-value Methodology

12.Basic chromosome number(s): $x=19^{9, 26, 27, 33, 34, 39, 47}$

13. Zygotic chromosome number(s): $2n=38^{9, 26, 27, 33, 34, 47}$,

$38+1f^{18}$,

57^{47}

14. Gametic chromosome number(s): $n=19^{34, 39, 47}$

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

Image file

16.Ploidy level:Diploid $^{9, 26, 27, 33, 34, 39, 47}$

Triploid 47

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: 47

KaryotypeMedian, submedian, 3 pairs subterminal⁴⁷

Chromosome sizeSmall⁴⁷

NOR chromosome(s)

Degree of asymmetrySymmetrical⁴⁷

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 meiosisDiploid cytotype: 19 II ^{46, 47}

Triploid cytotype: Multivalents observed^{46, 47}

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;Translocationetc.):**