

# Species Datasheet

Datasheet No. A-061.045.017  
(family.genus.species)

DBT- Network Programme

## 1. Taxon:

**Species:** *Cymbidium macrorhizon* Lindl.

Subspecies:

Variety:

Cultivar

Hybrid

Image file

## 2. Synonyms:

*Cymbidiopsis macrorhiza* (Lindl.) H.J.Chowdhery, *Pachyrhizantha macrorhiza* (Lindl.) Nakai, *Aphyllorchis aberrans* (Finet) Schltr., *Aphyllorchis tumkurensis* Bhaskar & Kushal, *Bletia nipponica* Franch. & Sav., *Cymbidium aberrans* (Finet) Schltr., *Cymbidium aphyllum* Ames & Schltr., *Cymbidium macrorhizon* var. *aberrans* (Finet) P.J.Cribb & Du Puy, *Cymbidium nipponicum* (Franch. & Sav.) Rolfe, *Cymbidium pedicellatum* Finet, *Cymbidium sagamiense* (Nakai) Makino & Nemoto, *Cymbidium szechuanensis* S.Y.Hu, *Pachyrhizantha aberrans* (Finet) Nakai, *Pachyrhizantha aphylla* Nakai, *Pachyrhizantha nipponica* (Franch. & Sav.) Nakai, *Pachyrhizantha sagamiensis* Nakai, *Yuania aberrans* Finet

## 3. Systematic Position:

### APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Monocots
- Order: Asparagales Link.
- Family: Orchidaceae Juss.
- Subfamily: Epidendroideae
- Tribe: Cymbidieae
- Subtribe: Cymbidiinae
- Genus: *Cymbidium* Sw.
- Species: *Cymbidium macrorhizon* Lindl.

### Bentham and Hooker (1862)

Kingdom: Plantae  
Division: Phanerogamia  
Class: Monocotyledonae  
Series: Microspermae  
Ordo: Orchideae  
Tribus: Vandaeae  
Subtribus: Cymbidieae  
Genus: *Cymbidium* Sw.  
Species: *Cymbidium macrorhizon* Lindl.

## 4. Distribution:

**Global:** Assam, Cambodia, China South-Central, East Himalaya, India, Japan, Korea, Laos, Myanmar, Nepal, Pakistan, Taiwan, Thailand, Vietnam, West Himalaya

**India:** Throughout Himalayas

## 5. Indigenous/Exotic/Endemic; Cultivated/Wild:

**6. Threat Status:**

**IUCN:**

**BSI:**

**7. Habit and Habitat:** Beautiful saprophytic species grows in open places under Pinus kesiya trees at about 1800 m

**8. Life Form:** Phanerophyte

**9. Economic Importance:** Medicinal, decoction from rhizome used to treat boils and used as diaphoretic

**10. Probable Progenitor of:**

**11. DNA**

**C-value          Methodology**

**12. Basic chromosome number(s):**  $x=19^{1,2}, 21, 23, 30$

**13. Zygotic chromosome number(s):**  $2n=38^{1,2}$

**14. Gametic chromosome number(s):**  $n=19^{1,21,23,30}$  (pollen mitosis)

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

Image file

**16. Ploidy level:** Diploid  $^{1,2}, 21, 23, 30$

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:**  $n=19$  <sup>1, 23, 30</sup>

**Karyotype** Bimodal <sup>1, 23, 30</sup>

**Chromosome size** Small to medium <sup>1, 23, 30</sup>

**NOR chromosome(s)** <sup>2</sup><sup>1</sup>

**Degree of asymmetry** Symmetrical <sup>1, 23, 30</sup>

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** <sup>19</sup><sup>II</sup><sup>1</sup>

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.):**

