

# Species Datasheet

Datasheet No. A-061.045.021  
(family.genus.species)

DBT- Network Programme

## 1. Taxon:

**Species:** *Cymbidium tracyanum* L.Castle

Subspecies:

Variety:

Cultivar

Hybrid

Image file

## 2. Synonyms:

*Cyperorchis tracyana* (L.Castle) Schltr., *Cymbidium zaleskianum* L.Linden,

## 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 tracyanum* L.Castle

### Bentham and Hooker(1862)

Kingdom: Plantae  
Division: Phanerogamia  
Class: Monocotyledonae  
Series: Microspermae  
Ordo: Orchideae  
Tribus: Vandeae  
Subtribus: Cymbidieae  
Genus: *Cymbidium* Sw.  
Species: *Cymbidium tracyanum* L.Castle

## 4. Distribution:

**Global:** Assam, China South-Central, Myanmar, Thailand, Tibet, Vietnam

**India:** Eastern India

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

## 6. Threat Status:

**IUCN:**

**BSI:**

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

**8.Life Form:** Phanerophyte

**9.Economic Importance:** This orchid is used in the local cut-flower trade and horticultural industry.

**10. Probable Progenitor of:**

**11.DNA**

|                |                    |
|----------------|--------------------|
| <b>C-value</b> | <b>Methodology</b> |
|----------------|--------------------|

**12.Basic chromosome number(s):** $x=20$ <sup>1, 19, 26, 37, 38, 45</sup>

**13. Zygotic chromosome number(s):** $2n=40$ <sup>1, 19, 26, 37, 38, 45</sup>

**14. Gametic chromosome number(s):** $n=20$ <sup>18, 45</sup>

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

Image file

**16.Ploidy level:**Diploid<sup>1, 18, 19, 26, 37, 38, 45</sup>

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:**<sup>1, 26, 37, 38</sup>

**Karyotype**Median, submedian, 1 pair telocentric<sup>1, 26</sup>

**Chromosome size**Small to medium<sup>1, 26, 37, 38</sup>

**NOR chromosome(s)**<sup>26, 37</sup>

**Degree of asymmetry** Moderately asymmetrical<sup>1, 26, 37, 38</sup>

Image file

**22. Banding pattern(s):**

Image file

**23. Physical mapping of chromosomes:**

**In situ hybridization**

Image file

**Fluorescent in situ hybridization:** 45S rDNA<sup>26, 37</sup>

Image file

**24. Genomic in situ hybridization:**

Image file

**25. Linkage map:**

Image file

**26. Chromosome associations:**

**Female meiosis**

**Male meiosis** 2011<sup>45</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.):**