

Species Datasheet

Datasheet No. A-061.045.018
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species: *Cymbidium mastersii* Griff. ex Lindl.

Subspecies:

Variety:

Cultivar

Hybrid

Image file

2. Synonyms:

Cyperorchis mastersii (Griff. ex Lindl.) Benth., *Cymbidium affine* Griff., *Cymbidium micromeson* Lindl.

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 mastersii* Griff. ex Lindl.

Bentham and Hooker (1862)

Kingdom: Plantae
Division: Phanerogamia
Class: Monocotyledonae
Series: Microspermae
Ordo: Orchideae
Tribus: Vandeae
Subtribus: Cymbidieae
Genus: *Cymbidium* Sw.
Species: *Cymbidium mastersii* Griff. ex Lindl.

4. Distribution:

Global: Assam, Bangladesh, China South-Central, East Himalaya, Myanmar, Thailand, Vietnam

India: Eastern Himalayas

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

6. Threat Status:

IUCN:

BSI:

7. Habit and Habitat: Warm to cold growing epiphyte, lithophyte or occasional terrestrial on humus

8.Life Form: Phanerophyte

9.Economic Importance:Cultivated ornamental

10. Probable Progenitor of:

11.DNA

C-value Methodology

12.Basic chromosome number(s): $x=20$ ^{1, 24, 26, 35, 37, 43, 47, 51}

13. Zygotic chromosome number(s): $2n=40$ ^{1, 26, 35, 37, 43, 47, 51}

14. Gametic chromosome number(s): $n=20$ ²⁴

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

Image file

16.Ploidy level:Diploid^{1, 24, 26, 35, 37, 43, 47, 51}

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:^{1, 35}

KaryotypeMedian, submedian^{1, 35}

Chromosome size Small to medium^{1, 35}

NOR chromosome(s)^{26, 37}

Degree of asymmetry Symmetrical^{1, 35}

Image file

22. Banding pattern(s):

Image file

23. Physical mapping of chromosomes:

In situ hybridization

Image file

Fluorescent in situ hybridization: 45S rDNA^{26, 37}

Image file

24. Genomic in situ hybridization:

Image file

25. Linkage map:

Image file

26. Chromosome associations:

Female meiosis

Male meiosis 2011²⁴

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.):