

Species Datasheet

Datasheet No. A-061.045.002
(family.genus.species)

DBT- Network Programme

1.Taxon:

Species: *Cymbidium aloifolium* (L.) Sw.

Subspecies:

Variety:

Cultivar

Hybrid

Image file

2. Synonyms: *Epidendrum aloifolium* L., *Limodorum aloifolium* (L.) Roxb., *Aerides borassii* Buch.-Ham. ex Sm., *Cymbidium aloifolium* f. album N.H.Tuan & V.T.Binh, *Cymbidium aloifolium* f. *flavescens* N.H.Tuan & V.T.Binh, *Cymbidium erectum* Wight, *Cymbidium intermedium* H.G.Jones, *Cymbidium pendulum* (Roxb.) Sw., *Cymbidium simulans* Rolfe, *Epidendrum aloides* Curtis, *Epidendrum pendulum* Roxb.,

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 aloifolium* (L.) Sw.

Bentham and Hooker(1862)

Kingdom: Plantae
Division: Phanerogamia
Class: Monocotyledonae
Series: Microspermae
Ordo: Orchideae
Tribus: Vandaeae
Subtribus: Cymbidieae
Genus: *Cymbidium* Sw.
Species: *Cymbidium aloifolium* (L.) Sw.

4.Distribution:

Global: Andaman Is., Assam, Bangladesh, Cambodia, China South-Central, China Southeast, East Himalaya, India, Jawa, Laos, Malaya, Myanmar, Nepal, Sri Lanka, Sumatera, Thailand, Vietnam, West Himalaya

India: Eastern Himalayas, at the base of hills from Sikkim to Assam, South India and Andaman Islands

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

6.Threat Status:

IUCN:

BSI:

7.Habit and Habitat:Beautiful epiphytic species grows in plains of Assam and near the base of KhasiJaintia hills at about 600 m

8.Life Form: Phanerophyte

9.Economic Importance:Cultivated ornamental

10. Probable Progenitor of:

11.DNA

C-value

Methodology

2C (9.32 pg)²⁵

Feulgen Microdensitometry²⁵

12.Basic chromosome number(s): $x=20$ ^{1, 5, 7, 13, 14, 18, 22, 23, 24, 25, 26, 27, 30, 32, 37, 39, 40, 47, 49}

13. Zygotic chromosome number(s): $2n=40$ ^{1, 5, 7, 13, 14, 18, 25, 26, 27, 32, 37, 39, 40, 47, 49}

14. Gametic chromosome number(s): $n=20$ ^{22, 23, 24, 30}

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

Image file

16.Ploidy level:Diploid^{1, 5, 7, 13, 14, 18, 22, 23, 24, 25, 26, 27, 30, 32, 37, 39, 40, 47, 49}

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, 26, 37}

Karyotype Medium, submedian^{1, 26, 37}

Chromosome size Small to medium^{1, 26, 37}

NOR chromosome(s)^{21, 26, 37}

Degree of asymmetry Symmetrical^{1, 26, 37}

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

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.):