

Species Datasheet

Datasheet No. A-061.074.006
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species: *Pleionepraecox* (Sm.) D.Don

Subspecies:

Variety:

Cultivar

Hybrid

Image file

2. Synonyms:

[*Coelogynebirmanica*Rchb.f.](#)

[*Coelogynepraecox* \(Sm.\) Lindl.](#)

[*Coelogynepraecox* var. *sanguinea*Lindl.](#)

[*Coelogynepraecox* var. *tenera*Rchb.f.](#)

[*Coelogynepraecox* var. *wallichiana* \(Lindl.\) Lindl.](#)

[*Coelogynerreichenbachiana*T.Moore&Veitch](#)

[*Coelogynewallichiana*Lindl.](#)

[*Cymbidiumpraecox* \(Sm.\) Lindl.](#)

[*Dendrobiumpraecox* \(Sm.\) Sm.](#)

[*Epidendrumpraecox* Sm.](#)

[*Pleionebirmanica* \(Rchb.f.\) B.S.Williams](#)

[*Pleioneconcolor*B.S.Williams](#)

[*Pleionepraecox* var. *alba*E.W.Cooper](#)

[*Pleionepraecox* var. *birmanica* \(Rchb.f.\) B.Grant](#)

[*Pleionepraecox* var. *candida*Pfitzer](#)

[*Pleionepraecox* f. *candida* \(Pfitzer\) O.Gruss&M.Wolff](#)

[*Pleionepraecox* var. *reichenbachiana* \(T.Moore&Veitch\) Torelli&Riccab.](#)

[*Pleionepraecox* var. *wallichiana* \(Lindl.\) E.W.Cooper](#)

[*Pleionereichenbachiana* \(T.Moore&Veitch\) Kuntze](#)

[*Pleionewallichiana* \(Lindl.\) Lindl. & Paxton](#)

3. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Monocots
- Order: Asparagales Link
- Family: Orchidaceae Juss.
- Subfamily: Epidendroideae
- Tribe: Arethuseae
- Subtribe: Coelogyinae
- Genus: *Pleione* D. Don
- Species: *Pleione praecox* (Sm.) D. Don

4. Distribution:

Global: Yunnan China, India, Nepal, Vietnam, north Thailand and Myanmar, 1200-3400m

India: Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Uttarakhand, West Bengal

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

6. Threat Status:

IUCN:

BSI:

7. Habit and Habitat: Pseudobulbous small sized epiphytic herb

8. Life Form: Phanerophytes

9. Economic Importance: Cultivated ornamental, medicinal, pseudobulb dried powder is tonic and paste used for cut and wounds

10. Probable Progenitor of:

11. DNA

C-value Methodology

12. Basic chromosome number(s): $x=20^5, 6, 8, 9, 10, 11, 12, 13, 14, 15, 17, 18, 19$

13. Zygotic chromosome number(s): $2n=40^5, 6, 8, 9, 10, 11, 12, 13, 14, 15, 17,$

$40+0-2B^{18},$

$40+0-3B^{19}$

14. Gametic chromosome number(s): $n=20^8, 9, 10, 20+0-3B^{19}$

15. Specialized chromosomes (B chromosomes/Sex chromosomes/Polytene

chromosomes/Neocentric chromosomes): In some plants in few PMC's 1-2 B's⁹

Image file

16. Ploidy level: Diploid^{5, 6, 8, 9, 10, 11, 12, 13, 14, 15, 17, 18, 19}

Image file

17. Agametoploidy:

18. Nature of polyploidy (auto, segmental, allo, autoallo):

19. Genomic formula:

20. Aberrant chromosome number(s) (aneuploidy, aneusomy, polysomy): Some variant PMCs with 19 and 21 IIs observed^{9, 13}

21. Somatic chromosomes:¹⁵

Karyotype: Median, submedian, 1 pair subterminal¹⁵

Chromosome size: Small¹⁵

NOR chromosome(s): 2¹⁵

Degree of asymmetry: Symmetrical¹⁵

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22. Banding pattern(s): C Banding¹⁷

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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: 20 II, some variant PMC's with 19 and 21 II^{9, 13}

Image file

27. Chromosome distribution at anaphase I: 20:20 distribution at A-I, occasionally laggards and bridges seen⁹

28. Genetic diversity:

Chromosomal level

Image file

DNA level

29. Any other information (Apomixis; Inversion; Male sterility; Pollen grain mitosis; Pollen stainability; Translocation etc.):