Genus Datasheet AmUL+SUK+NEHU

Datasheet No. A-061.003 (Family.Genus)

DBT- Network Programme

1. Genus: *Aerides* Lour.

2. Systematic Position:

APG IV

- Kingdom: Plantae
- Clade: Angisperms
- Clade: Monocots
- Order: Asparagales Link
- Family: Orchidaceae Juss.
- Subfamily: Epidendroideae
- Tribe: Vandeae
- SubtribeAeridinae
- Genus: *Aerides* Lour.

Bentham and Hooker

Kingdom: Plantae
Division: Phanerogamia
Class: Monocotyledonae
Series: Microspermae
Ordo: Orchideae
Tribus: Vandeae
Subtribus: Sarcantheae
Genus: *Aerides* Lour.

3. Species:

Global: 31

India: 12

4. Taxonomic riddles: 3, 4, 8, 29

5. Distribution:

Global: Bangladesh, Borneo, Cambodia, China South-Central, China Southeast, East Himalaya, India, Jawa, Laos, Lesser Sunda Is., Malaya, Myanmar, Nepal, Nicobar Is., Philippines, Sri Lanka, Sulawesi, Sumatera, Thailand, Vietnam, West Himalaya

India: Andhra Pradesh, Goa, Arunachal Pradesh, Mizoram, Tripura, Rajasthan, Nagaland, Odisha, Sikkim, Uttarakhand, Rajasthan

6. Habit and Habitat: Epiphytes; grow mainly in the warm lowlands.

7.Economic Importance: Some species are used for its medicinal properties.

8. DNA content range:

2C (7.57 pg) [16] (Narayan et al 1989)

Methodology

Feulgen Microdensitometry[16]

9. Basic chromosome number(s): x=18[7, 11, 12, 13],

19[1,2, 5, 6, 7, 9, 10, 12, 13, 14,17, 20, 21, 22, 23, 24, 25, 26, 27, 28],

20[19]

10. Zygotic chromosome number(s):2n=36[11, 12, 13] ,
38[1,2, 5, 6,9, 10, 12, 13, 14,17, 21, 22, 23, 24, 25, 26, 27, 28] ,

40[19] ,76[6]

11. Gametic chromosome number(s):n=19[1, 7, 12, 13, 14, 15, 18, 20]

12. Specialized chromosomes (B chromosomes/Sex chromosomes/Polytene Chromosomes/

Neocentric chromosomes):

13. Ploidy level Diploid [1, 2, 5, 6, 7, 9, 10, 11, 12, 13, 14, 15, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28]

Tetraploid[6]

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

15. Aberrant chromosome number(s) (aneuploidy, aneusomaty, polysomaty):

16. Karyograms: [12, 13,17, 20]

Meiosis:[7, 12, 13, 15, 18]

17. Banding pattern(s):

18. Physical mapping of chromosomes:

GISH:

19.Phylogenetic relationship atChromosomal; DNAlevel:[3, 4, 8, 29]

Zou LH, Huang JX, Zhang GQ, Liu ZJ, Zhuang XY 2015 A molecular phylogeny of Aeridinae (Orchidaceae: inferred from multiple nuclear and chloroplast regions. Molecular Phylogenetics and Evolution 85: 247-254

Molecular Phylogenetics and Evolution

understanding the evolution of the Aeridinae

KocyanA, Vogen de EF, Conti E, Gravendeel B

Hidayat T, Yukawa T, Ito M 2005 Molecularphylogenetics of subtribeAeridinae (Orchidaceae): insight frompl nuclear ribosomal ITS region. Plant Research 118: 271-284

Freudenstein JV, Chase MW 2015 Phylogenetic relationships in Epidendroideae (Orchidaceae), one of the gre radiations: progressive specialization and diversification. Annals of Botany 115: 665-681

20. Cytogenetic mechanism (s) underlying evolution:

21. Linkage map:

22. Any other information: