

Datasheet No. A-061.014
(Family.Genus)

DBT- Network Programme

1. Genus: *Calanthe* R.Br.

2. Systematic Position:

APG IV

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Monocots
- Order: Asparagales Link
- Family: Orchidaceae Juss.
- Subfamily: Epidendroideae
- Tribe: Collabieae
- Genus: *Calanthe* R.Br.

Bentham and Hooker

Kingdom: Plantae
Division: Phanerogamia
Class: Monocotyledonae
Series: Microspermae
Ordo: Orchideae
Tribus: Epidendreae
Subtribus: Blettieae
Genus: *Calanthe* R.Br.

3. Species:

Global: 223

India: 22

4. Taxonomic riddles:³⁷

5. Distribution:

Global: Bangladesh, Bismarck Archipelago, Borneo, Burundi, Cambodia, Cameroon, Cape Provinces, Caroline Is., China North-Central, China South-Central, China Southeast, Colombia, Comoros, Congo, Cook Is., Costa Rica, Cuba, Dominican Republic, East Himalaya, El Salvador, Equatorial Guinea, Fiji, Gabon, Guatemala, Guinea, Gulf of Guinea Is., Hainan, Honduras, India, Jamaica, Japan, Jawa, Kazan-retto, Kenya, Korea, KwaZulu-Natal, Laos, Lesser Sunda Is., Liberia, Madagascar, Malawi, Malaya, Maluku, Marianas, Marquesas, Mauritius, Mexico Central, Mexico Gulf, Mexico Northeast, Mexico Southeast, Mexico Southwest, Mozambique, Myanmar, Nansei-shoto, Nepal, New Caledonia, New Guinea, New South Wales, Nigeria, Niue, Norfolk Is., Northern Provinces, Northern Territory, Ogasawara-shoto, Pakistan, Panamá, Philippines, Queensland, Rwanda, Réunion, Samoa, Santa Cruz Is., Seychelles, Sierra Leone, Society Is., Solomon Is., Sri Lanka, Sulawesi, Sumatera, Swaziland, Taiwan, Tanzania, Thailand, Tibet, Tonga, Tubuai Is., Uganda, Vanuatu, Vietnam, Wallis-Futuna Is., West Himalaya, Zambia, Zaïre, Zimbabwe

India: East Himalaya

6. Habit and Habitat: Terrestrial herbs

7. Economic Importance: Some species are of ornamental potential.

8. DNA content range:

Methodology

2C (26.48 pg)²⁰ (Narayan et al 1989)

Feulgen Microdensitometry²⁰

9. Basic chromosome number(s): $x=14^{21, 25}$, $19^{24, 25}$,

$20^{1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 17, 18, 19, 20, 23, 26, 27, 28, 29, 30, 31, 33, 34, 35, 36}$,

$21^{13, 16, 21, 22, 25, 28, 31}$, $22^{21, 22, 25, 26}$, $24^{21, 22, 25}$, $26^{21, 25}$

10. Zygotic chromosome number(s): $2n=38^{24, 25}$,

$40^{1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 17, 18, 19, 20, 23, 26, 27, 28, 30, 31, 32, 33, 34, 35, 36}$,

$40+2B^{18}$, $40+1B^{6, 11, 12}$, $40+0-2B^{29, 30}$, $42^{13, 16, 21, 25, 28, 31}$, $44^{21, 25}$, $48^{21, 25}$, $52^{21, 25}$,
 $60^{10, 80^{18}}$

11. Gametic chromosome number(s): $n=20^{2, 9, 11, 12, 14, 15, 16, 17, 18, 23, 26, 28, 32, 33, 34}$,

$21^{16, 21, 22}$, $22^{21, 25}$, 40^{18} , $19-21^{17}$

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

Neocentric chromosomes):

13. Ploidy level Diploid $^{1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 32, 33, 34, 35, 36}$

Triploid 10

Tetraploid 18

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

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

16. Karvograms: 6, 11, 12, 26

18. Physical mapping of chromosomes:

GISH:

19. Phylogenetic relationship at Chromosomal; DNA level: ³⁷

Xiang XG, Jin WT, Li DZ, Schuitman A, Huang WC, Li JW, Jin XH, Li ZY 2014 Phylogenetics of tribe Collab
Epidendroideae) based on four chloroplast genes with morphological appraisal. Plos One 9: e87625

20. Cytogenetic mechanism (s) underlying evolution:

21. Linkage map:

22. Any other information: