

Genus Datasheet

Datasheet No. A-028.010
(Family: Genus)

DBT- Network Programme

1. Genus: *Cryptocoryne* Fisch. ex Wydler

2. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperm
- Clade: Monocots
- Order: Alismatales R. Br. ex Bercht. & J. Presl
- Family: Araceae Juss.
- Genus: *Cryptocoryne* Fisch. ex Wydler

Bentham and Hooker (1862)

Kingdom: Plantae
Division: Phanerogamia
Class: Monocotyledones
Series: Nudiflorae
Ordo: Aroideae Arn.
Genus: *Cryptocoryne* Fisch. ex Wydler

3. Species:

Global: 71

India: 7

4. Taxonomic riddles:

5. Distribution:

Global: Tropical Asia, Malay Archipelago

India: Nicobar Island, Peninsular & East India

6. Habit and Habitat: Rhizome creeping, stoloniferous. Tropical humid forest, freshwater tidal zone, rarely in brackish water, submerged or emergent aquatics.

7. Economic Importance:

8. DNA content range:

4C (10.35 pg) ¹

Methodology:

Feulgen cytophotometry ¹

9. Basic chromosome number(s): x=7 ²

x=9 ²

x=10 ⁹

x=11 ^{2,3,9}

x=14 ^{9,17}

x=15 ⁹

x=17 ^{2,9}

$$x=18^9$$

10. Zygotic chromosome number(s): $2n=20^{3,9}$

$$2n=22^{1,2,3,4,5,6,7,8,9,10}$$

$$2n=28^{11,12,13,14}$$

$$2n=30^3$$

$$2n=33^{3,6,9}$$

$$2n=34^{3,9}$$

$$2n=36^{3,9,18}$$

$$2n=42^9$$

$$2n=54^9$$

$$2n=56^{15}$$

$$2n=66^{6,9}$$

$$2n=68^{3,9}$$

$$2n=70^{13}$$

$$2n=72^{6,12}$$

$$2n=85^9$$

$$2n=88^{6,9}$$

$$2n=90^{4,5,7,8,10,16}$$

$$2n=102^9$$

$$2n=112^{17}$$

$$2n=132^9$$

11. Gametic chromosome number(s): $n=45^{4,5}$

12. Specialized chromosomes (B chromosomes/Sex chromosomes/Polytene chromosomes/ N chromosomes):

13. Ploidy level: Diploid 3,9

Triploid 3,9

Tetraploid 9

Octaploid 17

16. Karyograms: ^{4,15}

Meiosis: ⁴

17. Banding pattern(s):

18. Physical mapping of chromosomes:

GISH:

19. Phylogenetic relationship at Chromosomal; DNA level: Chromosomal level ¹⁹

DNA level

20. Cytogenetic mechanism(s) underlying evolution: Polyploidy, especially allopolyploidy has origin of species ⁴

21. Linkage map:

22. Any other information: