

Genus Datasheet

Datasheet No. A-031.001
(Family. Genus)

DBT- Network Programme

1. Genus: *Butomus* L.

2. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Monocots
- Order: Alismatales R. Br. ex Bercht. & J. Presl
- Family: Butomaceae Mirb.
- Genus: *Butomus* L.

Bentham and Hooker (1862)

Kingdom: Plantae
Division: Phanerogamia
Class: Monocotyledones
Series: Apocarpae
Ordo: Alismaceae
Genus: *Butomus* L.
Species: *B. umbellatus* L.

3. Species:

Global: 2

India: 1

4. Taxonomic riddles:

5. Distribution:

Global: Northern Africa, North Caucasus, China, Middle Asia, Russian, Western Asia, West Himalaya, Europe

India: West Himalaya

6. Habit and Habitat: Herb. Found in still or slowly-moving water.

7. Economic Importance:

8. DNA content range:

2C (15.1 pg) ¹

4C (30.2 pg) ¹

Methodology:

Flow cytometry ¹

9. Basic chromosome number(s): x=13 ^{9,11,18}

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

2n=22 ²⁴

2n=24 ^{4,5}

2n=26 ^{6,7,8,9,10,11,12,13,14,15,16,17,18}

2n=28 ^{20,21}

$$2n=30^{4,5,6}$$

$$2n=39^{8,17,18,22,23,25}$$

$$2n=40^{6,20,21,26}$$

$$2n=42^{26}$$

11. Gametic chromosome number(s): $n=10^3$

$$n=13^{17,21}$$

$$n=14^{21}$$

$$n=17-21^{21}$$

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

13. Ploidy level:Diploid 7,17,18

Triploid 17,18,20,26

Polyploidy 10

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

15. Aberrantchromosomenumber(s) (aneuploidy,aneusomaty, polysomaty):

16.Karyograms: 1,17,18

Meiosis: 1,3,7,17,21

17. Banding pattern(s):

18. Physical mapping of chromosomes:

GISH:

19.Phylogenetic relationship atChromosomal; DNA level:DNA level 19,27,28,29

20. Cytogenetic mechanism(s) underlying evolution

21. Linkage map:

22. Any other information:Pollen stainability 86.6 % 18 , 80.3 % 18 , Pollen mitosis showing 10 c