

Genus Datasheet

Datasheet No. A-034.001
(Family.Genus)

DBT- Network Programme

1. Genus: *Aponogeton* L.f

2. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Monocots
- Order: Alismatales R.Br.
- Family: Aponogetonaceae Planch.
- Genus: *Aponogeton* L.f.

Bentham and Hooker(1862)

Kingdom: Plantae
Division: Phanerogamia
Class: Monocotyledones
Series: Apocarpae
Ordo: Najadaceae Juss.
Tribus: Aponogetoneae Benth. & Hook. f.
Genus: *Aponogeton* L.f.

3. Species:

Global:57

India:8

4. Taxonomic riddles:^{3, 4, 16}

5. Distribution:

Global:Africa, Madagascar, China, Taiwan,India, Bangladesh,Nepal, Sri Lanka, Indo-China,Malaysia, Papuaasia,Australia.

India: Andhra Pradesh, Assam, Bihar,Chhattisgarh, Goa, Gujarat, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Meghalaya, Nagaland, Orissa, Punjab, Tamil Nadu, Telangana, Uttar Pradesh, West Bengal.

6. Habit and Habitat:Small to medium-sized perennial herbs growing in seasonally wet soil or submerged in temporary ponds or similar habitats, rarely in permanent water.

7.Economic Importance:Tubers of some species are edible.

8. DNA content range:

Methodology:

2C(3.5pg)¹⁴

Feulgen microdensitometry¹⁴

4C(6.9pg)¹⁴

9.Basic chromosome number(s):x= 8¹⁸

10.Zygotic chromosome number(s):2n =24⁷

2n=26^{2,13}

2n=30^{1,2,3,15}

2n=32^{1,2,3,4,14}

$$2n=50^8$$

$$2n=52^8$$

$$2n=56^{17}$$

$$2n=70^{1,2,4}$$

$$2n=74^{1,2,4}$$

$$2n=76^{9,10}$$

$$2n=78^{8,11}$$

$$2n=80^{2,4}$$

$$2n=92^{8,12}$$

11. Gametic chromosome number(s): $n=13^{13}$

$$n=24^{5,6}$$

$$n=25^8$$

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

13. Ploidy level: Diploid¹³

Polyploid⁹

14. Nature of polyploidy (auto, segmental, allo, autoallo): Aneuploidy and infraspecific Polyploidy

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

16. Karyograms: ^{3,9,13}

Meiosis: ¹³

17. Banding pattern(s):

18. Physical mapping of chromosomes:

GISH:

19. Phylogenetic relationship at Chromosomal; DNA level: DNA level¹⁶

20. Cytogenetic mechanism(s) underlying evolution: Polyploidy and aneuploidy have ; evolution of the genus⁹. Aneuploidy and infraspecific polyploidy seem to be common phenological cases combined with each other¹⁸

21. Linkage map:

22. Any other information: