

Species Datasheet

Datasheet No. A-032.009.004
(family.genus.species)

DBT-1

1. Taxon:

Species: *Vallisneria spiralis* L.

Subspecies:

Variety:

Cultivar:

Hybrid:

Image file

2. **Synonyms:** *Vallisneria aethiopica* Fenzl, *V. jacquiniana* Spreng., *V. jacquinii* Savi, *V. linnet* Bercht. & J. Presl, *V. micheliana* Spreng., *V. michelii* Savi, *V. numidica* Pomel, *V. pusilla* Barbieri ex Bertol., *V. spiralis* f. *aethiopica* (Fenzl) T. Durand & Schinz, *V. spiralis* var. *numidica* (Pomel) Maire & Weiller, *V. spiralis* var. *pusilla* (Barbieri ex Bertol.) Nyman

3. Systematic position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Monocots
- Order: Alismatales R. Br. ex Bercht. & J. Presl
- Family: Hydrocharitaceae Juss.
- Genus: *Vallisneria* L.
- Species: *V. spiralis* L.

Bentham and Hooker (1862)

Kingdom: Plantae
Division: Phanerogamia
Class: Monocotyledones
Series: Microspermae
Ordo: Hydrocharideae
Genus: *Vallisneria* L.
Species: *V. spiralis* L.

4. Distribution:

Global: Europe to Indo-China and S. Africa

India: Throughout India

5. Indigenous/Exotic/Endemic/Cultivated/Wild:

6. Threat Status:

IUCN: Least Concern

BSI

7. Habit and Habitat: Aquatic herb. Grows in slow-flowing or lentic lowland water bodies such as canals, ditches, rivers and occasionally lakes.

8. Life Form: Hydrophytes

9. Economic Importance: Used in aquarium and pond planting

10. Probable Progenitor of:

11. DNA

C-value Methodology:

12. Basic chromosome number(s):

13. Zygotic chromosome number(s): $2n=20^{1,2,6}22^424^330^333^640^{3,5,6}$

14. Gametic chromosome number(s): $n=10^4$

15. Specialized chromosomes (B chromosomes/Sex chromosomes/polytene chromosomes/Neocentric chromosomes):

Image file

16. Ploidy level: Diploid²

Image file

17. Agametoploidy:

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

19. Genomic formula:

20. Aberrant chromosome number(s) (aneuploidy, aneusomy, polysomy):

21. Somatic chromosomes:

Karyotype: Mostly sub-metacentric³

Chromosome size: Small size³

NOR chromosome(s): 2 NOR³

Degree of asymmetry: Asymmetrical³

Image file

22. Banding pattern(s):

Image file

23. Physical mapping of chromosomes:

In situ hybridization

Image file

Fluorescent in situ hybridization

Image file

24. Genomic in situ hybridization:

Image file

25. Linkage map:

Image file

26. Chromosome associations:

Female meiosis:

Male meiosis:

Image file

27. Chromosome distribution at anaphase I:

28. Genetic diversity:

Chromosomal level:

Image file

DNA level

29. Any other information (Apomixis; Inversion; Male sterility; Pollen grain mitosis; Pollen stainability; Translocations etc):