Species Datasheet

Datasheet No. A-032.007.001 **DBT-** 1
(family.genus.species)

1.Taxon:
Species**:***Ottelia alismoides* (L.) Pers.
Subspecies**:**
Variety**:**
Cultivar**:**
Hybrid**:**
Image file

2. Synonyms:*Boottiaalata*Gagnep.,*B. bodinieri* (H.Lév. &Vaniot) H.Lév. &Vaniot, *B. lanceolata*Gagnep.,*B. thorelii*Gagnep., *Damasoniumalismoides* (L.) R.Br.,*D. indicum*Willd., *D. javanicum* Blume, *D. lactucifolium* Planch., *D. lancifolium*C.Presl, *D. timorense*Zipp. ex Span., *D. tranquebariense*Schult.f., HydrocharisbodinieriH.Lév. &Vaniot,*Hymenothecalatifolia*Salisb., Ottelia alata (Gagnep.) H.Li, *O. alismoides* var. *cordifolia*Kuntze , *O. alismoides* var. *lacustris*(Kom.) Kitag.,*O. alismoides* f. lacustrisKom., *O. alismoides* var. *lanceolata*Kuntze, *O.alismoides* var. *oryzetorum* (Kom.) Kitag., *O. alismoides* f. *oryzetorum*Kom., *O.bodinieri* (H.Lév. &Vaniot) Dandy, *O. condorensis*Gagnep*., O.dioecia*S.Z.Yan , *O. ensiformis* Blanco, *O. hoffmeisteri*Klotzsch, O.indica (Willd.) Planch. ex Dalzell &A.Gibson, *O. japonica*Miq., *O. javanica* (Blume) Voigt, *O. lactucifolia* (Planch.) Walp*., O. lanceolata* (Gagnep.) Dandy, *O. philippinensis*Ostenf.,*O.thorelii* (Gagnep.) Dandy, *Stratiotes alismoides* L.*S. quinquealatus* Stokes

3.Systematic position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Monocots
- Order: Alismatales R. Br. ex Bercht. & J. Presl
- Family: HydrocharitaceaeJuss.
- Genus: *Ottelia* Pers.
- Species**:***O.alismoides* (L.) Pers.

Bentham and Hooker (1862)
Kingdom: Plantae
Division: Phanerogamia
Class: Monocotyledones
Series: Microspermae
Ordo: Hydrocharideae
Genus: *Ottelia* Pers.
Species**:***O.alismoides* (L.) Pers.

4.Distribution:

Global: Tropical & Subtropical Asia to North Australia

India: Throughout India

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

6.Threat Status:

IUCN: Least Concern

BSI:

7.Habit and Habitat: Submerged herb.This species grows in still or slow-moving shallow water such as lakes, ponds and rice fields.

8.Life Form: Hydrophytes

9.Economic Importance: This plant has medicinal properties and has been used against fever and piles. It is also a common aquarium plant.

10. Probable Progenitor of:

11.DNA

C-valueMethodology:

12.Basic chromosome number(s):x=11[5,8]

13. Zygotic chromosome number(s):2n= 22[4,6,8,10,11,12,13,14]33[8,10]34[12]44[1,4,5,9,11,12,13,14,15,16,17,18]52[19]56[20]60[12,20] 64[20]66[2,3,4,5,6,9,11,12,13,14,18,20] 72[20,21]68[5,18]88[4,11,12]110[18]132[2,3,6,9,11]

14. Gametic chromosome number(s):n=22[7,9,16]33[9]

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

Image file

16.Ploidy level: Triploid[8]

Image file

17.Agametoploidy:

18.Nature of polyploidy (auto, segmental, allo, autoallo): Allopolyploidy[9]

19.Genomic formula:

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

21.Somatic chromosomes:

Karyotype: Mostly Sub metacentric[5,9]

Chromosome size: Medium size[8,9]; Long to medium size (6.0µ-3.3µ)[5]

NOR chromosome(s):10NOR[5]; 8NOR[9]

Degree of asymmetry: Asymmetrical[5,9]

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: $22II^{9}33II^{9}$

28. Genetic diversity:

Chromosomal level:

Image file

DNA level

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