

Species Datasheet CalU+SUK-Phase I

Datasheet No. A-028.026.001
(family.genus.species)

DBT- Network Programme

-

1. Taxon:

Species: *Spirodela polyrhiza* (L.) Schleid.

Subspecies

Variety

Cultivar

Hybrid

Image file

2. Synonyms: *Lemna bannatica* Waldst. & Kit. ex Schleid., *L. major* Griff., *L. maxima* Blatt. & Hallb., *L. obcordata* P.Beauv., *L. orbicularis* Kit. ex Schult., *L. orbiculata* Roxb., *L. polyrrhiza* L., *L. polyrrhiza* var. *concolor* Kurz, *L. thermalis* P.Beauv., *L. thermalis* P.Beauv. ex Nutt., *L. transsilvanica* Schur, *L. umbonata* A.Braun ex Hegelm., *Lenticula polyrhiza* (L.) Lam., *Spirodela atropurpurea* Friche-Joset & Montandon, *S. maxima* (Blatt. & Hallb.) McCann, *S. polyrrhiza* var. *masonii* Daubs, *Telmatophace orbicularis* (Kit. ex Schult.) Schur, *T. polyrhiza* (L.) Godr.

3. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Monocot
- Order: Alismatales R. Br. ex Bercht. & J. Presl
- Family: Araceae Juss.
- Genus: *Spirodela* Schleid.
- Species: *S. polyrhiza* (L.) Schleid.

Bentham and Hooker (1862)

Kingdom: Plantae
Division: Phanerogamia
Class: Monocotyledones
Series: Nudiflorae
Ordo: Lemnaceae Gray
Genus: *Spirodela* Schleid.
Species: *S. polyrhiza* (L.) Schleid.

4. Distribution:

Global: India, Sri Lanka, Myanmar, Thailand, Malaysia

India: Assam, Maharashtra, Madhya Pradesh, Odisha, Punjab

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

6. Threat Status:

IUCN: Least concern

BSI

7. Habit and Habitat: Aquatic herb; found in ponds, ditches, old wells, rice -fields, shallow sluggish water courses

8. Life Form: Hydrophyte

9. Economic Importance: Used for bioremediation, removing toxic substances from aquatic environment as well as cleaning eutrophic waters, especially in wastewater treatment plants; also used as biofuel and as animal feed

10. Probable Progenitor of:

11. DNA

C- value

Methodology

12. Basic chromosome number(s):

13. Zygotic chromosome number(s):

14. Gametic chromosome number(s):

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

Image file

16. Ploidy level:

Image file

17. Agametoploidy

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

19. Genomic formula:

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

21. Somatic chromosomes:

Karyotype

Chromosome size

NOR chromosome(s)

Degree of asymmetry:

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):