

Species Datasheet CalU+SUK-Phase I

Datasheet No. A-028.025.002
(family.genus.species)

DBT- Network Programme

-

1. Taxon:

Species: *Lemna gibba* L.

Subspecies

Variety

Cultivar

Hybrid

Image file

2. Synonyms: *Lemna cordata* Sessé & Moc., *L. parodiana* Giardelli, *L. trichorrhiza* Thuill. ex Schleid., *Lenticula gibba* (L.) Moench, *L. gibbose* P.Renault, *Telmatophace arrhiza* Schur, *T. generalis* E.H.L.Krause, *T. gibba* (L.) Schleid., *T. gibbosa* (P.Renault) Montandon

3. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Monocot
- Order: Alismatales R. Br. ex Bercht. & J. Presl
- Family: Araceae Juss.
- Genus: *Lemna* L.
- Species: *L. gibba* L.

Bentham and Hooker (1862)

Kingdom: Plantae

Division: Phanerogamia

Class: Monocotyledones

Series: Nudiflorae

Ordo: Lemnaceae Gray

Genus: *Lemna* L.

Species: *L. gibba* L.

4. Distribution:

Global: Albania, Andorra, Argentina, Australia, Austria, Belgium, Bolivia, Colombia, Croatia, Czech Republic, Denmark, Ecuador, Finland, France, Germany, Gibraltar, Greece, Hungary, India, Ireland, Israel, Italy, Jordan, Lebanon, Lithuania, Luxembourg, Mexico, Morocco, Netherlands, Norway, Palestinian Territory, Peru, Poland, Portugal, Slovenia, Spain, Sri Lanka, Sweden, Switzerland, Syrian Arab Republic, Tanzania, United Kingdom, United States, Uruguay, Yemen

India: Kerala, Gujarat, Jammu and Kashmir, Punjab, Chhattisgarh, Madhya Pradesh, Maharashtra, Tamil Nadu

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

6. Threat Status:

IUCN: Least concern

BSI

7. Habit and Habitat: Free floating frond; grows in stagnant water, ponds and tanks, usually found in mesotrophic to eutrophic waters, grows in water rich in nitrates and carbonate

8. Life Form: Hydrophyte

9. Economic Importance: Used for the production of biopharmaceuticals, and as a source of animal feeds for agriculture and aquaculture

10. Probable Progenitor of:

11. DNA

C- value

Methodology

12. Basic chromosome number(s):

13. Zygotic chromosome number(s): $2n=40^{4,5}$; $2n=50^5$; $2n=60^6$; $2n=80^5$

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^{3,7}

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