

Species Datasheet

Datasheet No. A-030.007.001
(family.genus.species)

DBT- Netw

1. Taxon:

Species *Limnocharis flava* (L.) Buchenau
Subspecies
Variety
Cultivar
Hybrid

Image file

2. **Synonyms:** *Alisma flavum* L., *Damasonium flavum* (L.) Mill., *D. maximum* Burm. ex Steud., *Limnocharis emarginata* Humb. & Bonpl., *L. flava* var. *indica* Buchenau, *L. plumieri* Rich.

3. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Monocots
- Order: Alismatales R. Br. ex Bercht. & J. Presl
- Family: Alismataceae Vent.
- Genus: *Limnocharis* Bonpl.
- Species: *L. flava* (L.) Buchenau

Bentham and Hooker (1862)

Kingdom: Plantae
Division: Phanerogamia
Class: Monocotyledones
Series: Apocarpae
Ordo: Alismaceae
Genus: *Limnocharis* Bonpl.
Species: *L. flava* (L.) Buchenau

4. Distribution:

Global: Andaman Island, Argentina, Bolivia, Borneo, Brazil, Cambodia, Caribbean Cuba, Caribbean Windward Island, China, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, India, Jawa, Malaya, Malesia, Mexico, Myanmar, Nicaragua, Panamá, Paraguay, Peru, Sri Lanka, Sumatera, Thailand, Venezuela, Vietnam

India: Assam, Kerala

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

6. Threat Status:

IUCN:

BSI:

7. **Habit and Habitat:** Aquatic herb, Tropical Moist Forest

8. **Life Form:** Hemicryptophytes

9. **Economic Importance:**

10. Probable Progenitor of:

11. DNA C-value

1C (8.4pg) ¹

2C (16.7pg) ¹

3C (25.1pg) ¹

4C (33.5pg) ¹

Methodology

Feulgen microdensitometry ¹

12. **Basic chromosome number(s):** x=5²

x=10⁶

13. **Zygotic chromosome number(s):** 2n=20^{1,2,3,4,6,7,8,9,10,13,14,15}

2n=26¹¹

2n=29¹¹

14. Gametic chromosome number(s): $n=10^{2,4,5,12}$

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

Image file

16. Ploidy level: Diploid ^{1,13,14}

Polyploid ²

Image file

17. Agametoploidy:

18. Nature of polyploidy (auto, segmental, allo, autoallo): Amphidiploid ²

19. Genomic formula:

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

21. Somatic chromosomes:

Karyotype Majority subtelocentric chromosomes^{2,6,13,15}, Majority submetacentric chromosomes³

Chromosome size Small to medium¹⁵, medium to long³; medium^{6,13}

NOR chromosome(s): 2 NOR^{3,6,15}, 4 NOR²

Degree of asymmetry: 3B Category of Stebbins chart of Asymmetry⁶; Asymmetrical^{13,14}

Image file

22. Banding pattern(s): C-banding¹³; 4 C/CMA⁺/DAPI⁰ banding¹⁴

Image file

23. Physical mapping of chromosomes:

In situ hybridization:

Image file

Fluorescent in situ hybridization: Four 45S rDNA sites¹⁴

Image file

24. Genomic in situ hybridization:

Image file

25. Linkage map:

Image file

26. Chromosome associations:

Female meiosis

Male meiosis: 10 II^{2,3}

Image file

27. Chromosome distribution at anaphase I: Normal, secondary association of bivalents noted²

28. Genetic diversity:

Chromosomal level

Image file

DNA level

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