

Species Datasheet CalU+SUK-Phase I

Datasheet No. A-032.010.010
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species: *Najas minor* All.

Subspecies

Variety

Cultivar

Hybrid

Image file

2. Synonyms: *Caulinia fragilis* Willd., *C. minor* Coss. & Germ., *Fluvialis minor* Pers., *Ittnera minor* C.C.Gmel., *Najas dichotoma* Roxb., *N. fragilis* Delile, *N. minor* var. *intermedia* Ces., *N. minor* var. *longifolia* R.Corti, *N. minor* var. *spinosa* Rendle, *N. moshanensis* N.Z.Wang, *N. subulata* Thuill., *N. ternata* Roxb. ex Griff.

3. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Monocots
- Order: Alismatales R. Br. ex Bercht. & J. Presl
- Family: Hydrocharitaceae
- Subfamily: Hydrilloideae
- Genus: *Najas* L.
- Species: *N. minor* All.

Bentham and Hooker (1862)

- Kingdom: Plantae
- Division: Phanerogamia
- Class: Monocotyledones
- Series: Apocarpace
- Ordo: Najadaceae Juss.
- Genus: *Najas* L.
- Species: *N. minor* All.

4. Distribution:

Global: Afghanistan, Algeria, Amur, Austria, Bangladesh, Belarus, Belgium, Bulgaria, Buryatiya, Central European Rus, China, Czechoslovakia, East European Russia, Egypt, France, Germany, Greece, Hainan, Hungary, India, Inner Mongolia, Iran, Iraq, Italy, Japan, Kazakhstan, Khabarovsk, Korea, Lebanon-Syria, Libya, Manchuria, Morocco, Nansei-shoto, Nepal, Netherlands, North Caucasus, Northwest European R, Pakistan, Palestine, Philippines, Poland, Portugal, Primorye, Romania, South European Russi, Spain, Sri Lanka, Switzerland, Tadzhikistan, Taiwan, Transcaucasus, Tunisia, Turkey, Turkey-in-Europe, Ukraine, Uzbekistan, Vietnam, Xinjiang, Yugoslavia

India: Almost throughout India

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

6. Threat Status:

IUCN:

BSI

7. Habit and Habitat: Aquatic herb; prefers calm waters, such as ponds, reservoirs and lakes

8. Life Form: Hydrophyte

9. Economic Importance:

10. Probable Progenitor of:

11. DNA

C-value

Methodology

12. Basic chromosome number(s):

13. Zygotic chromosome number(s): $2n=12^{4,5,7}$; $2n=24^{1,4,6,8,9}$; $2n=36^7$; $2n=46^{10}$

14. Gametic chromosome number(s): $n=6^5$

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, aneusomy, polysomy):

21. Somatic chromosomes:

Karyotype: Majority nearly sub-metacentric chromosomes⁵

Chromosome size: $1.6-5.0\mu$ ⁵

NOR chromosome(s): $2NOR^5$

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: 6II⁵

Image file

27. Chromosome distribution at anaphase I: Regular⁵

28. Genetic diversity:

Chromosomal level

Image file

DNA level

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