

Species Datasheet

Datasheet No. P-017.003.009

(family.genus.species)

DBT- Network Programme

1.Taxon:

Species: *Marsilea minuta* L.

Subspecies:

Variety:

Cultivar

Hybrid

Image file

2. Synonyms:

Marsileabrasiliensis Mart.

Marsileacrenulata Desv.

Marsileadiffusa Lepr.

Marsileadiffusa var. *approximata* A. Braun

Marsileaminuta var. *minuta*

Marsileaperrieriana C. Chr.

Marsileapolycarpa Hook. & Grev.

Marsileapolycarpa var. *mexicana* A. Braun

Zaluzianskiapolycarpa (Hook. & Grev.) Kuntze

3.Systematic Position:

Christenhusz 2011

- Class: Equisetopsida C.Agardh
- Subclass: Polypodiidae Cronquist, Takht. & Zimmerm.
- Order: Salviniales Bartl. in Mart
- Family: Marsiliaceae Mirb. in Lamb & Mirb.
- Subfamily:
- Genus: *Marsilea* L.
- Species: *Marsilea minuta* L.
- Subspecies:

4.Distribution:

Global: Bangladesh; Bhutan; Brazil; Cambodia; China; India; Indonesia; Japan; Lao People's Democratic Republic; Malaysia; Maldives; Myanmar; Nepal; Philippines; Singapore; Sri Lanka; Thailand; Trinidad and Tobago; Viet Nam

India: Andaman Is., Andhra Pradesh, Assam, Bihar, Delhi, Gujarat, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh, West Bengal

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

6.Threat Status:

IUCN:

BSI:

7.Habit and Habitat: It is found in shallow pools, at the edges of rivers, canals and ditches and in rice fields. It is most abundant in temporarily flooded places where it may form large and dense colonies which can become locally dominant. It tolerates considerable organic pollution and sporocarps develops as the water recedes

8.Life Form:

9.Economic Importance: In Bangladesh, the rural people of Mymensingh eat the fronds as vegetable and they have got relief from hypertension, sleeping disorders and headache by regular eating. In Haluaghat and Dhobaura of Mymensingh district the Garo and Coach drink the juice of fresh shoots as a remedy for cough, respiratory troubles, especially for their babies

10. Probable Progenitor of:

11.DNA

C-value Methodology

12.Basic chromosome number(s): $x=20^{5, 6, 7, 11, 12, 13, 15, 17}$

13. Zygotic chromosome number(s): $2n=40^{5, 6, 7, 11, 12, 13, 15, 17}$,

14. Gametic chromosome number(s): $n=20$ ^{5, 11, 12, 13, 15, 17}

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

Image file

16.Ploidylevel:Diploid (sexual)^{5, 7, 11, 12, 13, 17},

Triploid^{11, 12, 13}

Image file

17.Agametoploidy:

18.Nature of polyploidy (auto, segmental, allo, autoallo):Autotriploid^{11, 12, 13}

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 Diploid: $20\text{II}^{11, 12, 13}$

Triploid: Completely abnormal meiosis resulting in sterile monads ^{11, 12, 13}

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; Translocation etc.):