

Species Datasheet

Datasheet No. P-016.001.004

(family.genus.species)

DBT- Network Programme

1.Taxon:

Species: *Azolla pinnata* R.Br.

Subspecies:

Variety:

Cultivar

Hybrid

Image file

2. Synonyms:Nil

3.Systematic Position: Christenhusz 2011

- Class: Equisetopsida C.Agardh
- Subclass: Polypodiidae Cronquist, Takht. & Zimmerm.
- Order: Salviniales Bartl. in Mart
- Family: Salviniaceae Martinov
- Subfamily:
- Genus: *Azolla* Lam.
- Species: *Azolla pinnata* R.Br.
- Subspecies:

4.Distribution:

Global: Africa, Asia, China, Japan, India, Australia, Phillipines

India:

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

6.Threat Status:

IUCN:

BSI:

7.Habit and Habitat:aquatic fern, its frond floating upon the surface of the water. It grows in quiet and slow-moving water bodies, because swift currents and waves break up the plant

8.Life Form:

9.Economic Importance:

10. Probable Progenitor of:

11.DNA

C-value Methodology

12.Basic chromosome number(s): $x=22$ ^{2, 3, 4, 5, 6, 7, 9, 10, 11, 12}

13. Zygotic chromosome number(s): $2n=44$ ^{3, 4, 7, 9, 10, 11}, 66 ^{4, 7, 10, 11, 12}, 88 ^{10, 11}

14. Gametic chromosome number(s): $n=22$ ^{2, 4, 9}, 44 ^{5, 6}

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

Image file

16.Ploidy level:Diploid (sexual)^{2, 3, 4, 7, 9, 10, 11},

Triploid (sterile)^{4, 7, 10, 11, 12},

Tetraploid (sexual)^{5, 6, 10, 11}

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:⁴

Karyotype Ratio of longest to shortest 2.0⁴

Chromosome size Very small⁴

NOR chromosome(s)

Degree of asymmetry Asymmetrical⁴

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: $22\text{II}^2, 4, 9$

Triploid: $6\text{I}+12.43\text{II}+11.71\text{III}^4, 44\text{II}^6$

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.):