

Species Datasheet

Datasheet No. P-037.001.041
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species: *Asplenium septentrionale* (L.) Hoffm.

Subspecies:

Variety:

Cultivar

Hybrid

Image file

2. Synonyms:

Acrostichum septentrionale L.

Amesiumsasaki Hayata

3. Systematic Position:

Christenhusz 2011

- Class: Equisetopsida C. Agardh
- Subclass: Polypodiidae Cronquist, Takht. & Zimmerm.
- Order: Polypodiales Link.
- Family: Aspleniaceae Newman
- Subfamily:
- Genus: *Asplenium* L.
- Species: *Asplenium septentrionale* (L.) Hoffm.
- Subspecies:
- Variety:

4. Distribution:

Global: Western North America, Europe, and Asia

India: Western Himalayas

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

6. Threat Status:

IUCN:

BSI:

7. Habit and Habitat: It is epipetric and can be found in crevices of rocks, around boulders, and on cliffs extending up to snow line 4200m

8. Life Form:

9. Economic Importance:

10. Probable Progenitor of:

11. DNA

C-value Methodology

12. Basic chromosome number(s): $x=36$ ^{5, 11, 32, 60, 75, 81, 87, 90, 91, 92, 93, 98, 113, 129, 146}

13. Zygotic chromosome number(s): $2n=c.144$ ^{75, 87}

14. Gametic chromosome number(s): $n=36$ (sterile diploid obtained from cultivation of gametophyte of normal 4x cytotype)^{31, 72}^{5, 11, 32, 60, 81, 90, 91, 92, 93, 98, 113, 129, 146}

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

Image file

16.Ploidy level:Diploid (sterile diploid obtained from cultivation of gametophyte of normal 4x cytotype)³¹,

Tetraploid (sexual) ^{5, 11, 32, 60, 81, 90, 91, 92, 93, 98, 113, 129, 146}

Image file

17.Agametoploidy:

18.Nature of polyploidy (auto, segmental, allo, autoallo):Autopolyploid³⁰

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 Tetraploid: 72II⁵, 11, 32, 60, 81, 90, 91, 92, 93, 98, 113, 129, 146,

Diploid (sterile diploid obtained from cultivation of gametophyte of normal 4x cytotype):

13.1III+45.7I³¹

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.):