

Species Datasheet

Datasheet No. P-037.001.004
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species: *Asplenium aethiopicum* (Burm. f.) Bech.

Subspecies:

Variety:

Cultivar

Hybrid

Image file

2. Synonyms:

Asplenium canariense Willd.

Asplenium falsum Retz.

Asplenium filare (Forssk.) Alston

Asplenium praemorsum var. *laceratum* Hieron.

Trichomanes aethiopicum Burm. f.

3. Systematic Position:

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

4. Distribution:

Global: China (Hunan, Jiangxi, Sichuan, Yunnan), India, Indonesia, Malaysia, Myanmar, Philippines, Thailand, Vietnam; tropical Africa, tropical America, Australia, Macaronesia, Pacific islands (Hawaii)].

India: South India

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

6. Threat Status:

IUCN:

BSI:

7. Habit and Habitat: On rocks in mixed forests; 1000-2600 m.

8. Life Form:

9. Economic Importance:

10. Probable Progenitor of:

11. DNA

C-value Methodology

12. Basic chromosome number(s): $x=36^{1,25,38,47,49,80,111,134}$

13. Zygotic chromosome number(s): $2n=288^{1,38}, 216^{106}, 360^{106}$

14. Gametic chromosome number(s): $n=c.72^{134}, 144^{25,47,49,80,111,180}, 216^{87}$

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

Image file

16. Ploidy level: Tetraploid (sexual)¹³⁴, Hexaploid (hybrid)¹⁰⁶, Octoploid (sterile hybrid)^{1,38}

Octoploid (sexual)^{25,47,49,80,111}, Octoploid (aneuploid)¹³⁴,

10-ploid (hybrid)¹⁰⁶,

12-ploid⁸⁷

Image file

17. Agametoploidy:

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

19. Genomic formula:

20. Aberrant chromosome number(s) (aneuploidy, aneusomaty, polysomaty): Aneuploid¹³⁴

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 Octoploid: $144\text{II}^{25, 47, 111}$

Octoploid (sterile): $2\text{VIII}+1\text{VI}+4\text{IV}+2\text{III}+86\text{II}+72\text{I}^{1, 38}$,

Hexaploid F1 hybrid (4x Kenya, $n=72\text{II}$, $2n=144$) X (8x Kenya $n=144\text{II}$, $2n=288$) $72\text{II}+72\text{I}^{106}$,

10-ploid F1 hybrid (8x Kenya $n=144\text{II}$, $2n=288$) X (12x Madeira $n=216\text{II}$, $2n=432$) $108\text{II}+144\text{I}^{106}$

12-ploid: 216II^{87}

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.):