Species Datasheet

Datasheet No. P-037.001.044
(family.genus.species)

DBT- Network Programme

1.Taxon:

Species: *Asplenium trichomanes* L.

Subspecies:
Variety:
Cultivar
Hybrid

Image file

2. Synonyms:

*Aspleniummelanocaulon*Willd.
Aspleniumtrichomanes subsp. *trichomanes*
Chamaefilixtrichomanes (L.) Farw.

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 trichomanes* L.
- Subspecies*:*
- *Variety:*

4.Distribution:

Global:widespread in temperate and subarctic areas and also occurs in mountainous regions in the tropics. Its range includes most of Europe and much of Asia south to Turkey, Iran and the Himalayas with a population in Yemen, in northern, southern and parts of eastern Africa and eastern Indonesia, south-east Australia, Tasmania, New Zealand and Hawaii,North America and Central America and Cuba, and the northern and western regions of South America such as Chile.

India: Himalayas

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

6.Threat Status:

IUCN: Least concern

BSI:

7.Habit and Habitat:

8.Life Form:

9.Economic Importance:

10. Probable Progenitor of:

11.DNA

C-value	**Methodology**
2C: 12.20 pg[127]	Flow cytometry[127]
2C: 15.90 pg[117]	Flow cytometry[117]
2C: 18.11pg[2]	Flow cytometry[2]

12.Basic chromosome number(s):x=36[3,11, 16, 20, 21, 26, 31, 45, 60, 61, 68, 76, 78, 81, 82, 85, 90, 91, 92, 93, 94, 95, 98, 108, 130, 140, 141, 146]

13. Zygotic chromosome number(s):2n=72[45, 68, 78], 108[133, 141], 144[3, 26,61, 76, 81, 82, 90, 91, 92, 93, 94, 95, 130, 140]

14. Gametic chromosome number(s):n=36[11, 16, 20, 21, 31, 60, 85, 98, 108, 140, 141, 146], 72[3, 16, 24, 30, 96, 115, 116, 134, 140, 142], c.72[107, 131], 108[27], 144[115, 116]

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

Image file

16.Ploidylevel: Diploid (sexual)[11, 16, 20, 21, 45, 60, 75, 85, 98, 108, 146] , Triploid[140], Tetraploid(sexual)[3, 10, 21, 24, 96, 107, 115, 134] , Hexaploid (sexual)[27] , Octoploid (sexual)[115, 116]

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:

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: 36II[11, 21, 85, 108],

Tetraploid**:** 72II[3, 10, 16, 21, 24, 96, 116, 134],

Hexaploid: 108II[27, 115, 116],

Octoploid: 144II[115,] **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;Translocationsetc.):