

Species Datasheet

Datasheet No. P-030.012.008
(family.genus.species)

DBT- Network Programme

1.Taxon:

Species: *Pteris biaurita* L.

Subspecies:

Variety:

Cultivar

Hybrid

Image file

2. Synonyms:

Campteriabiaurita (L.) Hook.

Campteriagaleotti (Fée) T. Moore

Litobrochiabaurita (L.) J. Sm.

Litobrochiagaleottii Fée

Pteris flavicaulis Hayata

3.Systematic Position:

Christenhusz 2011

- Class: Equisetopsida C. Agardh
- Subclass: Polypodiidae Cronquist, Takht. & Zimmerm.
- Order: Polypodiales Link.
- Family: Pteridaceae E.D.M. Kirchn
- Subfamily: Pteridoideae C. Chr. Ex Crabbe, Jermy & Mickel
- Genus: *Pteris* L.
- Species: *Pteris biaurita* L.
- Subspecies:
- Variety:

4.Distribution:

Global: India, Nepal, Bhutan, China, Sri Lanka, Philippines, Malaysia, Java, Borneo, Myanmar, C. and S. America

India: : Sikkim, Darjeeling, Arunachal Pradesh, Meghalaya, Nagaland, Tripura, central and south Indian

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

6.Threat Status:

IUCN:

BSI:

7.Habit and Habitat:Generally grows along the banks of streamlets or in wet places in forested areas. Quite common in the region between 600 and 1300m altitude, Loharkhet, Bharari

8.Life Form:

9.Economic Importance:

10. Probable Progenitor of:

11.DNA

C-value Methodology

12.Basic chromosome number(s): $x=29^{1, 16, 35, 51, 68}$

13. Zygotic chromosome number(s): $2n=58^{1, 16, 51, 68}$,

$87^{9, 10, 11, 12, 15, 28, 37, 51, 52, 73}$,

116^{40}

14. Gametic chromosome number(s): $n=29^{35, 68}$,

$58^{1, 16, 40, 51, 57}$,

$87^{9, 10, 11, 12, 15, 28, 37, 51, 52, 73}$,

]

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

Image file

16.Ploidy level:Diploid (sexual) ^{35, 68,}

Diploid (apogamous)^{1, 16, 51, 57 ,}

Triploid (apogamous)^{9, 10, 11, 12, 15, 28, 37, 51, 52, 73 ,}

Tetraploid^{40,}

12-ploid (sexual)^{59, 60}

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 meiosisDiploid: 29II^{35, 68} ,

Diploid (apogamous): 8-celled sporangium 58II, irregular meiosis in 16-celled sporangium ^{1, 16, 51, 57} ,

Triploid (apogamous): 16-celled sporangium 29II+29I, 8-celled sporangium 87II, 4-celled sporangium 174II
9, 10, 11, 12, 15, 28, 37, 51, 52, 73 ,

Tetraploid: 58II⁴⁰,

12-ploid: c.174II^{59, 60}

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;Translocationsetc.):Apogamy^{1, 9, 10, 11, 12, 15, 16, 28, 37, 51, 52, 57, 73}