

Species Datasheet

Datasheet No. P-045.006.021
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species: *Polystichum luctuosum* (Kunze) T. Moore

Subspecies:

Variety:

Cultivar

Hybrid

Image file

2. Synonyms:

Aspidiumaculeatum var. *pallescens* Franch.

Aspidiumluctuosum Kunze

Aspidiumtsus-simense Hook.

Polystichumfalcilobum Ching

Polystichumtsus-simense (Hook.) J. Sm.

Polystichumtsus-simense var. *pallescens* Franch.

3. Systematic Position:

Christenhusz 2011

- Class: Equisetopsida C. Agardh
- Subclass: Polypodiidae Cronquist, Takht. & Zimmerm.
- Order: Polypodiales Link.
- Family: Dryopteridaceae Herter
- Subfamily: Dryopteridoideae B.K. Nayar
- Genus: *Polystichum* Roth
- Species: *Polystichum luctuosum* (Kunze) T. Moore
- Subspecies:
- Variety:

4. Distribution:

Global: India, W-Nepal, South Africa (Limpopo, Mpulamanga, Free State, KwaZulu-Natal, E-Cape Prov.), Swaziland, Lesotho, E-Zimbabwe, Madagascar, La Réunion

India: Himachal Pradesh, Uttaranchal, Arunachal Pradesh

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

6.Threat Status:

IUCN:

BSI:

7.Habit and Habitat:Terrestrial or epilithic, usually in deep shade on the floor of seasonally moist forests, in leaf litter or on rocks. Not edaphically bound. Nanophanerophyte, mesophyte; fronds mesomorphic.

8.Life Form:

9.Economic Importance:

10. Probable Progenitor of:

11.DNA

C-value Methodology

12.Basic chromosome number(s): $x=41^{45}$

13. Zygotic chromosome number(s): $2n=123^{8, 16, 17, 21, 40, 41, 49}$

14. Gametic chromosome number(s): $n=82^{45},$
 $123^{8, 17, 40, 41}$

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

Image file

16.Ploidylevel: Triploid (apogamous)^{8, 17, 40, 41},

Tetraploid (sexual)⁴⁵

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 Triploid (apogamous): 8-celled sporangium $123II^{8, 17, 40, 41}$,

Tetraploid: $82II^{45}$

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.): Apogamy^{8, 17, 40, 41}