

Species Datasheet

Datasheet No. P-045.010.046
(family.genus.species)

1. Taxon:

Species: *Dryopteris sparsa* (D. Don) Kuntze

DBT- Network Programme

Subspecies:

Variety:

Cultivar

Hybrid

Image file

2. Synonyms:

[*Aspidium cataphoron* Kunze](#)

[*Aspidium sparsum* \(D. Don\) Spreng.](#)

[*Dryopteris sparsa* var. *ryukyuensis* Seriz.](#)

[*Dryopteris sparsa* var. *sparsa*](#)

[*Dryopteris viridescens* \(Baker\) Kuntze](#)

[*Lastreasparsa* \(D. Don\) T. Moore](#)

[*Nephrodium sparsum* D. Don](#)

[*Nephrodium sparsum* var. *latisquamum* C.B. Clarke](#)

[*Polystichum sparsum* \(D. Don\) Keyserl.](#)

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: *Dryopteris* Adans.
- Species: *Dryopteris sparsa* (D. Don) Kuntze
- Subspecies:
- Variety:

4. Distribution:

Global: India, China, Indochina, throughout Malesia to Polynesia, Taiwan and north to S Japan

India: Uttarakhand, Darjeeling, Arunachal Pradesh, Nagaland, Manipur, Meghalaya, Tripura

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

6. Threat Status:

IUCN:

BSI:

7. Habit and Habitat: Epiphyte, On mountain slopes in dense forests or in light shade at 1000–1500 m alt.

8. Life Form:

9. Economic Importance:

10. Probable Progenitor of:

11.DNA

C-value Methodology

12.Basic chromosome number(s): $x=41^{16, 43, 55, 56, 62, 69, 70, 71, 75, 82, 83, 84}$

13. Zygotic chromosome number(s): $2n=82^{16, 50, 53, 69, 70, 71},$

$123^{16, 56}$

$164^{16, 19, 20},$

14. Gametic chromosome number(s): $n=41^{16, 43, 55, 56, 62, 69, 70, 71, 75, 82, 83, 84},$

$80^{47},$

$82^{1, 9, 10, 16, 17, 20, 25, 40, 43, 46, 48, 56, 68, 93},$

$c.82^{81},$

$123^{16, 23, 56}$

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

Image file

16.Ploidy level:Diploid (sexual) $^{16, 23, 43, 50, 55, 56, 62, 67, 69, 70, 71, 75, 82, 83, 84}$

Triploid (sterile) 56

Triploid (apogamous) 16

Tetraploid (sexual) $^{1, 9, 10, 16, 17, 19, 20, 25, 40, 43, 46, 48, 56, 68, 93}$

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: 71

KaryotypeMedian, submedian and subterminal 71

Chromosome sizeSmall 71

NOR chromosome(s)

Degree of asymmetryModerately asymmetrical 71

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: 41II¹⁶, 43, 55, 56, 62, 67, 69, 70, 71, 75, 82, 83, 84 ,

Triploid (sterile): 5III+38II+32I, 4III+41II+29I⁵⁶,

Triploid (apogamous) : 8-celled sporangium 123II¹⁶

Tetraploid: 82II¹, 9, 10, 16, 17, 20, 40, 43, 46, 56, 68

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.): Apogamy¹⁶