

Species Datasheet

Datasheet No. P-045.010.028
(family.genus.species)

DBT- Network Programme

1.Taxon:

Species: *Dryopteris juxtaposita* Christ

Subspecies:

Variety:

Cultivar

Hybrid

Image file

2. Synonyms:

Aspidium filix-mas var. *normale* (C.B. Clarke) Christ

Dryopteris odontoloma (Bedd.) C. Chr.

Lastrea odontoloma Bedd.

Nephrodium filix-mas var. *normale* C.B. Clarke

3.Systematic Position:

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- 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 juxtaposita* Christ
- Subspecies:
- Variety:

4.Distribution:

Global: India, Afghanistan, Bhutan, Myanmar, China, Japan, Nepal, Pakistan, Thailand, Tibet and Vietnam

India: Throughout Himalayas, South India ,Kerala (Idukki district), 1800-2400m

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

6.Threat Status:

IUCN:

BSI:

7.Habit and Habitat: in evergreen and shola forests, terrestrial herb

8.Life Form:

9.Economic Importance:

10. Probable Progenitor of:

11.DNA

C-value Methodology

12.Basic chromosome number(s): $x=41^{37, 43, 55, 56, 85}$

13. Zygotic chromosome number(s): $2n=82^{55},$

$123^{19, 27, 28, 43, 55, 56, 62, 64}$

14. Gametic chromosome number(s): $n=41^{37, 43, 55, 56, 85},$

123 (apogamous) $^{7, 19, 27, 28, 43, 55, 56, 62, 64},$

$123^{25, 48}$

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

Image file

16.Ploidy level:Diploid (sexual) $^{37, 43, 55, 56, 85},$

Triploid (apogamous) 7, 19, 27, 28, 43, 55, 56, 62, 64,

Hexaploid (sexual) 25, 48

Image file

17. Agametoploidy:

18. Nature of polyploidy (auto, segmental, allo, autoallo): Autotriploid Loyal 1961c, Mehra & Loyal 1965

19. Genomic formula: AAA 43, 56

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: $41\text{II}^{37, 43, 55, 56, 85}$

Triploid (apogamous): 16-celled sporangium $14\text{III}+27\text{II}+27\text{I}$, 8-celled sporangium 123II , 4-celled sporangium $246\text{II}^{43, 56}$

8-celled sporangium $123\text{II}^{7, 19, 27, 28, 55, 62, 64}$

16-celled sporangium $41\text{II}+41\text{I}$, 123I , 8-celled sporangium $123\text{II}^{19, 27, 28}$

Hexaploid: $123\text{II}^{25, 48}$

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^{7, 19, 27, 28, 43, 55, 56, 62, 64}