

Species Datasheet

Datasheet No. P-042.015.003
(family.genus.species)

DBT- Network Programme

1.Taxon:

Species: *Macrothelypteris torresiana* (Gaudich.) Ching

Subspecies:

Variety:

Cultivar

Hybrid

Image file

2. Synonyms:

Aspidium mollissimum Christ
Aspidium uliginosum Kunze
Dryopteris lasiocarpa Hayata
Dryopteris mollissima (Christ) C. Chr.
Dryopteris oligophlebia var. *lasiocarpa* (Hayata) Nakai
Dryopteris setigera (Blume) Kuntze
Dryopteris uliginosa (Kunze) C. Chr.
Lastrea flaccida (Blume) T. Moore
Lastrea setigera Bedd.
Lastrea tenericaulis T. Moore
Lastrea torresiana (Gaudich.) T. Moore
Nephrodium tenericaule (Wall. ex Hook.) Hook.
Polypodium pallidum Brack.
Polypodium tenericaule Wall. ex Hook.
Polystichum torresianum Gaudich.
Thelypteris oligophlebia var. *lasiocarpa* (Hayata) H. Itô
Thelypteris setigera (Blume) Ching
Thelypteris torresiana (Gaudich.) Alston

3.Systematic Position:

Christenhusz 2011

- Class: Equisetopsida C. Agardh
- Subclass: Polypodiidae Cronquist, Takht. & Zimmerm.
- Order: Polypodiales Link.
- Family: Thelypteridaceae Pic. Serm.

- Subfamily:
- Genus: *Macrothelypteris* (H. Itô) Ching
- Species: *Macrothelypteris torresiana* (Gaudich.) Ching
- Subspecies:
- *Variety*:

4.Distribution:

Global: Native to tropical and subtropical Asia, Africa.

India: South India (Nilgiris)

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

6.Threat Status:

IUCN:

BSI:

7.Habit and Habitat: Terrestrial in damp woods and along stream banks; 0--100 m

8.Life Form:

9.Economic Importance: contains flavanoids which have been investigated for possible medicinal value

10. Probable Progenitor of:

11.DNA

C-value Methodology

12.Basic chromosome number(s): $x=31^4, 6, 7, 8, 13, 14, 15, 16, 19, 20, 21$

13. Zygotic chromosome number(s): $2n=124^4, 7, 8, 12, 13, 15, 16, 19, 21$

14. Gametic chromosome number(s): $n=31^6, 14, 20$,

62^{6, 10},

c.62¹⁸

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

Image file

16.Ploidy level:Diploid (sexual)^{6, 14, 20},

Tetraploid (sexual)^{4, 6, 7, 8, 10, 12, 13, 15, 16, 18, 19, 21}

Image file

17.Agametoploidy:

18.Nature of polyploidy (auto, segmental, allo, autoallo):

19.Genomic formula:

20.Aberrant chromosome number(s)(aneuploidy, aneusomy, polysomy):

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: 31II⁶, 14, 20

Tsai, J. L. & W. C. Shieh. 1985. A cytotaxonomic survey of the fern family Aspidiaceae (*sensu* Copeland) in Taiwan. *J. Sci. Engin.* 22: 121–144.

Mitui, K. 1976a. Chromosome numbers of some ferns in the Ryukyu Islands. *J. Jap. Bot.* 51: 33–41.

Irudayaraj&Manickam 1995

Tetraploid: 62II⁶, 10, 18

Loyal, D. S. 1991. Cytomorphological studies in the eastern Himalayan Thelypteridaceae. In: T. N. Bhardwaj & C. B. Gena (editors), Perspectives in Pteridology: Present and Future. Aspects Pl. Sci. 13: 171–248.

Irudayaraj&Manickam 1995

c.62 Smith, A. R. & M. S. Foster. 1984. Chromosome numbers and ecological observations of ferns from El Tirol, Paraguay. Brit. Fern Gaz. 12: 321–329.

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.):