

Species Datasheet

Datasheet No. P-051.007.005
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species: *Phymatosorus membranifolium* (R. Br.) S.G. Lu

Subspecies:

Variety:

Cultivar

Hybrid

Image file

2. Synonyms:

Microsorium alternifolium (Willd.) Copel.

Microsorium membranifolium (R. Br.) Ching

Microsorium nigrescens (Blume) Copel.

Phymatodes nigrescens (Blume) J. Sm.

Phymatodes nigrescens var. *variabilis* (Ching) C. Chr. & Tardieu

Phymatodes variabilis Ching

Phymatosorus nigrescens (Blume) Pic. Serm.

Phymatosorus variabilis (Mett.) Pic. Serm.

Pleopeltis nigrescens (Blume) Carrière

Polypodium alternifolium Willd.

Polypodium nigrescens Blume

3. Systematic Position:

Christenhusz 2011

- Class: Equisetopsida C. Agardh
- Subclass: Polypodiidae Cronquist, Takht. & Zimmerm.
- Order: Polypodiales Link.
- Family: Polypodiaceae J. Presl & C. Presl
- Subfamily: Microsoroideae B.K. Nayar
- Genus: *Phymatosorus*
- Species: *Phymatosorus membranifolium* (R.Br.) S.G. Lu
- Subspecies:

- Variety:

4.Distribution:

Global: Sri Lanka, India, Vietnam, Cambodia, throughout Malaysia and Polynesia.

India: South India

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

6.Threat Status:

IUCN:Least concern

BSI:

7.Habit and Habitat: Epiphytic and terrestrial on rather dry rocks in mixed forests at low altitudes.

8.Life Form:

9.Economic Importance:

10. Probable Progenitor of:

11.DNA

C-value **Methodology**

12.Basic chromosome number(s): $x=36^{1, 3, 6, 8, 11, 17, 18}$

13. Zygotic chromosome number(s): $2n=72^{1, 6, 17, 18}$

14. Gametic chromosome number(s): $n=36^{1, 3, 8, 11, 17, 18}, 72^{24}$

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

Image file

16.Ploidy level:Diploid (sexual) ^{1, 3, 6, 8, 11, 17, 18} ,
Tetraploid(sexual)^{23, 24}

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:¹⁸

KaryotypeMostly subterminal two pairs submedian¹⁸

Chromosome sizeSmall¹⁸

NOR chromosome(s)

Degree of asymmetryAsymmetrical¹⁸

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:36II^{1, 3, 8, 11, 17, 18},

Tetraploid: 72II^{23, 24}

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.):