

Species Datasheet

Datasheet No. P-030.002.023
(family.genus.species)

DBT- Network Programme

1.Taxon:

Species: *Adiantum raddianum* C. Presl

Subspecies:

Variety:

Cultivar

Hybrid

Image file

2. Synonyms:

Adiantum colpodes T. Moore

Adiantum cuneatum G. Forst.

Adiantum moorei Baker

Adiantum tinctum Moore

Adiantum werckleanum Christ

3.Systematic Position:

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- Class: Equisetopsida C.Agardh
- Subclass: Polypodiidae Cronquist, Takht. & Zimmerm.
- Order: Polypodiales Link.
- Family: Pteridaceae E.D.M. Kirchn
- Subfamily: Vittarioideae (C. Presl) Crabbe, Jermy & Mickel
- Genus: *Adiantum* L.
- Species: *Adiantum raddianum* C.Presl
- Subspecies:
- Variety:

4.Distribution:

Global: Zimbabwe, Malawi and Mozambique in Southern Africa, New Guinea and Sri Lanka ,Guatemala , Lesser Antilles, tropical America, from Mexico and the West Indies, Peru and Argentina

India: Sikkim, West Bengal, TamilNadu

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

6.Threat Status:

IUCN:

BSI:

7.Habit and Habitat:Terrestrial species is very common in fully or partially dry places along the road sides, earth cuttings and in road rock crevices, sometimes as lithophytes. It is occasionally seen in fully shaded wet places and stream bank sides. It grows on stone wall crevices between 800 - 1800m.

8.Life Form:

9.Economic Importance:

10. Probable Progenitor of:

11.DNA

C-value Methodology

12.Basic chromosome number(s): $x=29^{17}, 30^{8, 19, 72, 73, 74, 75}$

13. Zygotic chromosome number(s): $2n=90^{72, 120^{73, 74, 75}}, 114^1, 171^1, 228^5$

14. Gametic chromosome number(s): $n=57^{1, 5, 18, 80}, 87^{17}, 58^{17}$

$60^{8, 19, 73, 74, 75}, 114^5, 6, 18, 20, 21, 39, 40, 171^{40}, 228^5$

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

Image file

16.Ploidy level: Triploid (sterile)⁷², Triploid (apogamous)¹⁷, Tetraploid (aneuploid)^{1, 5, 17, 18, 80}

Tetraploid (sexual)^{8, 19, 73, 74, 75}, Hexaploid (aneuploid)¹, Octoploid (aneuploid)^{5, 6, 18, 20, 21, 39, 40}

12-ploid (aneuploid)⁴⁰, 16-ploid (aneuploid)⁵

Image file

17.Agametoploidy:

18.Nature of polyploidy (auto, segmental, allo, autoallo): Autopolyploidy⁵

19.Genomic formula:

20.Aberrant chromosome number(s)(aneuploidy, aneusomaty, polysomaty): Aneuploid¹

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) 87II^{17} , Tetraploid 60II^{74} , Hexaploid (aneuploid) $1\text{III}+56\text{II}+56\text{I}^1$,

Octoploid (aneuploid) Irregular meiosis (sterile)⁵

12-ploid (aneuploid) $85\text{II}+1\text{I}^{40}$

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.):