

Species Datasheet

Datasheet No. P-030.021.001
(family.genus.species)

DBT- Network Programme

1.Taxon:

Species: *Pellaea boivinii* Hook.

Subspecies:

Variety:

Cultivar

Hybrid

Image file

2. Synonyms: *Pteris adiantoides* Desv.

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: Cheilantheoideae W.C. Shieh
- Genus: *Pellaea* Copel.
- Species: *Pellaea boivinii* Link
- Subspecies:

4.Distribution:

Global: South Africa (Limpopo, Gauteng, Mpulamanga), N-Botswana, Zambia, Zimbabwe, Madagascar, Comores, Mauritius, Kenya, Tanzania, Sri Lanka, India

India: S-India (Kerala, Tamil Nadu)

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

6.Threat Status:

IUCN:

BSI:

7.Habit and Habitat: Lithophyte, Terrestrial Granite 'whalebacks', on quartzite and sandstone in rock crevices and at the edge of vegetation islands overlying granite sheetrock., 1000 - 1500 m

8.Life Form:

9.Economic Importance:

10. Probable Progenitor of:

11.DNA

C-value Methodology

12.Basic chromosome number(s): $x=30^{2, 4, 5}$

13. Zygotic chromosome number(s): $2n=60^4$

Kuriachan, P. I. & C. A. Ninan. 1976. Cytological evolution in the fern family Pteridaceae. In: P. K. K. Nair (editor), Aspects of Plant Sciences. 1: 127.

$120^{6, 7}$

Samkari Ammal, L. & K. V. Bhavanandan. 1991. Cytological studies on some members of Pteridaceae (sensu Copeland) from south India. Indian Fern J. 8: 87–92.

Sankari ammal 1990

14. Gametic chromosome number(s): $n=30^{2, 4, 5}$

Irudayaraj, V. & V. S. Manickam. 1987. SOCGI plant chromosome number reports -- IV [i.e., V]. J. Cytol. Genet. 22: 156–161.

Kuriachan, P. I. & C. A. Ninan. 1976. Cytological evolution in the fern family Pteridaceae. In: P. K. K. Nair (editor), Aspects of Plant Sciences. 1: 127.

Manickam, V. S. & V. Irudayaraj. 1988. Cytology of Ferns of the Western Ghats (South India). 81 pp.

Sankari Ammal, L. & K. V. Bhavanandan. 1991. Cytological studies on some members of Pteridaceae (sensu Copeland) from south India. Indian Fern J. 8: 87–92.

Sankari Ammal 1990

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

Image file

16.Ploidy level: Diploid (sexual)^{2, 4, 5}

Irudayaraj, V. & V. S. Manickam. 1987. SOCGI plant chromosome number reports -- IV [i.e., V]. J. Cytol. Genet. 22: 156–161.

Kuriachan, P. I. & C. A. Ninan. 1976. Cytological evolution in the fern family Pteridaceae. In: P. K. K. Nair (editor), Aspects of Plant Sciences. 1: 127.

Manickam, V. S. & V. Irudayaraj. 1988. Cytology of Ferns of the Western Ghats (South India). 81 pp.

Tetraploid^{6, 7}

Sankari Ammal, L. & K. V. Bhavanandan. 1991. Cytological studies on some members of Pteridaceae (sensu Copeland) from south India. Indian Fern J. 8: 87–92.

Sankari Ammal 1990

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:

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: $30\text{II}^{2, 4, 5}$

Irudayaraj, V. & V. S. Manickam. 1987. SOCGI plant chromosome number reports -- IV [i.e., V]. J. Cytol. Genet. 22: 156–161.

Kuriachan, P. I. & C. A. Ninan. 1976. Cytological evolution in the fern family Pteridaceae. In: P. K. K. Nair (editor), Aspects of Plant Sciences. 1: 127.

Manickam, V. S. & V. Irudayaraj. 1988. Cytology of Ferns of the Western Ghats (South India). 81 pp.

Tetraploid: $60\text{II}^{6, 7}$

Sankari Ammal, L. & K. V. Bhavanandan. 1991. Cytological studies on some members of Pteridaceae (sensu Copeland) from south India. Indian Fern J. 8: 87–92.

Sankari Ammal 1990

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.):