Species Datasheet

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Datasheet No. P-030.012.012
(family.genus.species)

DBT- Network Programme

1.Taxon:

Species: *Pteris cretica* L.

Subspecies:
Variety:
Cultivar
Hybrid

Image file

2. Synonyms:

Pteriscretica var. *cretica*
*Pterispentaphylla*Willd.
Pterisserraria Sw.
Pteristreacheriana Baker
*Pteristrifoliata*Fée
Pycnodoriacretica (L.) Small

3.Systematic Position:
Christenhusz 2011

- Class: EquisetopsidaC.Agardh
- Subclass: PolypodiidaeCronquist, Takht. &Zimmerm.
- Order: Polypodiales Link.
- Family: Pteridaceae E.D.M. Kirchn
- Subfamily: Pteridoideae C. Chr. Ex Crabbe, Jermy&Mickel
- Genus: *Pteris* L.
- Species: *Pteris cretica* L.
- Subspecies:
- Variety:

4.Distribution:

Global: India, Pakistan, Iran, Nepal, Bhutan, China, Philippines, Polynesia, Malaysia, Myanmar, Bangladesh, SriLanka, Europe, E. and S. Africa, Madagascar, Mascarenes, C. and S. America, Ascension

India: Jammu & Kashmir, Himachal Pradesh, Sikkim, Darjeeling, Assam, Arunachal Pradesh, Meghalaya, Manipur, Nagaland, Tripura, south & central India

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

6.Threat Status:

IUCN:

BSI:

7.Habit and Habitat: Grows in moist open or shaded localities or at the margins or in the forests. A very common and abundant fern upto 3000m altitude, Khati, Dwali, Maitoli, Jaitoli, Dhakuri, Madhari, Sikhar, Liti

8.Life Form:

9.Economic Importance:

10. Probable Progenitor of:

11.DNA

C-value Methodology

12.Basic chromosome number(s):x=29[19, 28, 29, 43, 51, 55, 56, 61, 68, 69, 70, 71, 73, 74, 76, 77, 78]

13. Zygotic chromosome number(s):2n=58[19, 28, 29, 43, 51, 55, 56, 61, 68, 69, 70, 71, 73, 74, 76, 77, 78] ,

87[3, 15, 28, 37, 51, 52, 56, 68, 69, 75, 76, 77]

14. Gametic chromosome number(s):n=29[61],

58[19, 28, 29, 43, 51, 55, 56, 68, 69, 70, 71, 73, 74, 76, 77,78] ,

87 3, 15, 28, 37, 51, 52, 56, 68, 69, 75, 76, 77

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

Image file

16.Ploidy level: Diploid (sexual)[61] ,

Diploid (apogamous) [19, 28, 29, 43, 51, 55, 56, 68, 69, 70, 71, 73, 74, 76, 77, 78]

Triploid (apogamous)[3, 15, 28, 37, 51, 52, 56, 68, 69, 75, 76, 77]

Image file

17.Agametoploidy:

18.Nature of polyploidy (auto, segmental, allo, autoallo): Allotriploid[76, 77]

19.Genomic formula: AA_1B[76, 77]

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: 29II[61],

Diploid (apogamous): 8-celled sporangium 58II [28, 29, 43, 51, 55, 56, 68, 69, 70, 71, 73, 78] ,

16-celled sporangium 4I+27II, 6I+26II, 2I+28II , 8-celled sporangium 58II [74,76, 77] ,

16-celled sporangium 29II, 58I, 22-27II+4-14I, 8-celled sporangium 58II, 4-celled sporangium 116II [19] ,

Triploid (apogamous): 8-celled sporangium 87II[3, 15, 28, 37, 51,52, 56, 68, 69, 74, 75, 76, 77],

16-celled sporangium 19I+28II+4III, 22I+28II+3III, 25I+28II+2III [74, 76, 77]

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.): Apogamy[3, 15,19, 28, 29, 37, 43, 51, 52, 55, 56, 68, 69, 70, 71, 73, 74, 75, 76, 77, 78]