Species Datasheet

Datasheet No. P-008.001.001
(family.genus.species)

DBT- Network Programme

1.Taxon:

Species: *Osmunda claytoniana* L.

Subspecies:
Variety:
Cultivar
Hybrid

Image file

2. Synonyms:

Osmundaclaytoniana f. *claytoniana*
Osmundastrumclaytonianum (L.) Tagawa
Plenasiumclaytonianum (L.) C. Presl
Struthiopterisclaytoniana (L.) Bernh.

3.Systematic Position:

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- Class: Equisetopsida C.Agardh
- Subclass: Polypodiidae Cronquist, Takht. & Zimmerm.
- Order: Osmundales Link
- Family: Osmundaceae Martinov
- Subfamily:
- Genus: *Osmunda* L.
- Species: *Osmunda claytoniana* L.
- Subspecies:

4.Distribution:

Global:native to Eastern Asia and eastern North America, in the Eastern United States and Eastern Canada.

India: Kashmir (Pahlgam, Khillanmarg), Uttarakhand (Valley of flowers), West Bengal (Darjeeling) North Sikkim (Lachen Valley)

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

6.Threat Status:

IUCN:

BSI:

7.Habit and Habitat: In eastern Asia, the fern is found in the subtropical and temperate Asia in: the Eastern Himalaya, South Central China and Eastern China, Taiwan, the Korean Peninsula, the Ryukyu Islands, and Japan.
found in humid zones, mostly in forests, but also in more open habitats and biomes

8.Life Form:

9.EconomicImportance: TheIroquois used the plant as treatment for blood disorders and venereal diseases,

Cultivated as ornamental

10. Probable Progenitor of:

11.DNA

C-value	**Methodology**
2C (26.91 pg)[2]	Flow cytometry[2]
2C (27.70pg)[1]	Flow cytometry[1]

12.Basic chromosome number(s):x=22[7, 8, 29, 35, 40]

13. Zygotic chromosome number(s):2n=44[4,7, 8, 12, 29, 35, 40]

14. Gametic chromosome number(s):n=22[4, 7, 12, 29]

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

Image file

16.Ploidylevel: Diploid (sexual)[4, 7, 8, 12, 29, 35, 40]

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 meiosis22II[4, 7, 12, 29]

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.):