

Species Datasheet

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Datasheet No. P-006.002.002
- **(family.genus.species)**

DBT- Network Programme

1.Taxon:

Species: *Ophioglossum costatum* R.Br.

Subspecies:

Variety:

Cultivar

Hybrid

Image file

2. Synonyms:

Ophioglossum fibrosum Schumach.

Ophioglossum pedunculatum Desv.

Ophioglossum wightii Grev. & Hook.

3.Systematic Position:

Christenhusz 2011

- Class: Equisetopsida C.Agardh
- Subclass: Ophioglossidae Klinge
- Order: Ophioglossales Link
- Family: Ophioglossaceae Martinov.
- Subfamily:
- Genus: *Ophioglossum* L.
- Species: *Ophioglossum costatum* R.Br.
- Subspecies:
- Variety:

4.Distribution:

Global:: India, Africa, Comores Archipelago, Malagasy, Sri Lanka, Sumatra to East Australia, New Zealand, Sumatra and Guinea coast

India: Kerala (Kannur, Kozhikkode, Wayanad, Malappuram, Palakkad, Thrissur, Idukki districts), Western Ghats, Palghat, Belgaum, Maharashtra (Pune, Khandala Hills, Lonawala, Mahabaleshwar) Madhya Pradesh, (Gwalior, Sultangarh)

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

6.Threat Status:

IUCN:

BSI:

7.Habit and Habitat:Terrestrial, in grasslands of laterite hills, paddy fields, forest margins, etc

8.Life Form:

9.Economic Importance:

10. Probable Progenitor of:

11.DNA

C-value Methodology

12.Basic chromosome number(s): $x=30$ (Palaeobasic)^{9, 14, 15, 19, 20, 27, 28},
120 (Neobasic)^{9, 14, 15, 19, 20, 27, 28}

13. Zygotic chromosome number(s): $2n=c.200$ ²¹

14. Gametic chromosome number(s): $n=c.190$ ²¹,
120^{9, 14, 15, 19, 20, 27, 28},
124⁹,
166-182⁹,
100^{14, 15},
115^{14, 15},

116^{14, 15},

240^{14, 15}

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

Image file

16.Ploidy level:Hexaploid (aneuploid)/Diploid (aneuploid)²¹,

12-ploid(aneuploid)/tetraploid (aneuploid)²¹,

Octoploid/Diploid^{9, 14, 15, 19, 20, 27, 28},

Octoploid(aneuploid)/Diploid (aneuploid)⁹,

Decaploid (aneuploid)/Triploid (aneuploid)⁹,

Hexaploid (aneuploid)^{14, 15},

Octoploid (aneuploid)^{14, 15},

16-ploid/Tetraploid^{14, 15}

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 Octoploid/Diploid: 120II^{9, 14, 15, 19, 20, 27, 28},

Octoploid (aneuploid)/Diploid (aneuploidy): 124II⁹,

Hexaploid (aneuploid): 100II^{14, 15}

Octoploid (aneuploid): 110II, 115II, 116II^{14, 15}

16-ploid/Tetraploid 240II^{14, 15}

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.):