# Species Datasheet

**Datasheet No. P-045.010.016**
**(family.genus.species)**

**DBT- Network Programme**

**1.Taxon:**

**Species:** *Dryopteris cristata* (L.) A. Gray

Subspecies:
Variety:
Cultivar
Hybrid

Image file

**2. Synonyms:**

*Dryopteriscristata* var. *cristata*
*Polypodiumcristatum* L.

**3.Systematic Position:**
**Christenhusz 2011**

- Class: EquisetopsidaC.Agardh
- Subclass: PolypodiidaeCronquist, Takht. &Zimmerm.
- Order: Polypodiales Link.
- Family: Dryopteridaceae Herter
- Subfamily: Dryopteridoideae B.K. Nayar
- Genus: *Dryopteris* Adans.
- Species: *Dryopteris cristata* (L.) A.Gray
- Subspecies:
- Variety

**4.Distribution:**

**Global:**Native to wetlands throughout the Northern Hemisphere.

**India:**

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

**6.Threat Status:**

**IUCN:**

**BSI:**

**7.Habit and Habitat:**Wetlands plant, needing year-round moisture.

**8.Life Form:**

**9.EconomicImportance:**Plant has been used as an anti-microbial agent; for example, root extracts from *D. cristata has* been shown efficacious in expelling intestinal parasites from certain mammals.

**10. Probable Progenitor of:**

**11.DNA**

| **C-value** | **Methodology** |
|---|---|
| 2C (33.85 pg)[3] | Flow cytometry[3] |

**12.Basic chromosome number(s):x=**41[6, 13, 59, 70, 71, 89]

**13. Zygotic chromosome number(s):**2n=82[6, 13, 59, 70, 71, 89] ,

123[6, 70] ,

164[12, 13, 14, 33, 42, 50, 51, 76, 77, 78, 86, 87, 88, 89, 91, 92]

**14. Gametic chromosome number(s):**n=41[6, 70] ,

82[77, 78, 88, 94] ,

123 [6, 70]

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

Image file

**16.Ploidylevel:**Diploid (sexual) [6, 13, 59, 70, 71, 89] ,

Triploid (apogamous) [6, 70] ,

Tetraploid(sexual)[12, 13, 14, 33, 42, 50, 51, 76, 77, 86, 87, 88, 89, 91, 92, 94]

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:**[71]

**Karyotype**Median, submedian, subterminal[71]

**Chromosome size** Small[71]

**NOR chromosome(s)**

**Degree of asymmetry**Moderately asymmetrical[71]

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:41II [6, 70] ,

Tetraploid: 82II [77, 78, 88, 94] ,

Triploid (apogamous): 8-celled sporangium 123II[6, 70]

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[6, 70] ,

82[77, 78, 88, 94] ,