# Species Datasheet

**Datasheet No. P-008.001.003**
**(family.genus.species)**

**DBT- Network Programme**

**1.Taxon:**

**Species:** *Osmunda regalis* L.

Subspecies:
Variety:
Cultivar
Hybrid

Image file

**2. Synonyms:**

*Aphyllocalparegalis* (L.) Lag., D. García& Clemente
*Osmundalongifolia* (C. Presl) A.E. Bobrov
*Osmundamexicana*Fée
*Osmundaobtusifolia*Kaulf.
*Osmundapalmeri* A.E. Bobrov
*Osmundapalustris*Schrad.
*Osmundaregalis* f. *abyssinica* Kuhn
*Osmundaregalis* var. *brevifolia*Desv.
*Osmundaregalis* var. *capensis*Milde
*Osmundaregalis* var. *longifolia* C. Presl
*Osmundaregalis* var. *obtusifolia* (Kaulf.) Milde
*Osmundaregalis* subsp. *palustris* (Schrad.) Á. Löve& D. Löve
*Osmundaschelpei* A.E. Bobrov
*Osmundaspectabilis*Willd.
*Osmundaspectabilis* var. *brasiliensis* Hook. &Grev.
*Osmundaspectabilis* var. *palustris* (Schrad.) C. Presl
*Osmundatransvaalensis* A.E. Bobrov
*Struthiopterisregalis* (L.) Bernh.

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

- Class: Equisetopsida C.Agardh
- Subclass: Polypodiidae Cronquist, Takht. & Zimmerm.
- Order: Osmundales Link
- Family: Osmundaceae Martinov

- Subfamily:
- Genus: *Osmunda* L.
- Species: *Osmunda regalis* L.
- Subspecies:

**4.Distribution:**

**Global:**Native to Europe, Africa and Asia,

**India:** Western Ghats--Kerala (Ponmudi, Munnar, Deviculum), Palni Hills, Kodaokanal, Himachal Pradesh (Simla, Chadwick Falls), Madhhya Pradesh (Pachmarhi Hills), Maharashtra (Manabaleshwar, Lonawala, Khandala), Kashmir (Khillanmarg), Assam, Meghalaya, Sikkim

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

**6.Threat Status:**

**IUCN:**

**BSI:**

**7.Habit and Habitat:**Deciduousfern, growing in woodland bogs and on the banks of streams

**8.Life Form:**

**9.Economic Importance:**Ornamental,roots, along with those of other species of *Osmunda*, are used for the production of osmunda fibre, used as a growing medium for cultivated orchids and other epiphytic plants.

**10. Probable Progenitor of:**

**11.DNA**

| **C-value** | **Methodology** |
|---|---|
| 2C (28.01 pg) [2] | Flow cytometry[2] |

**12.Basic chromosome number(s):**x=22[3, 4, 5, 9, 10, 11, 15, 16, 17, 19, 20, 21, 22, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 36, 37, 38, 39, 41]

**13. Zygotic chromosome number(s):**2n=44[3, 4, 9, 16, 19, 20, 21, 22, 24, 28, 30, 31, 34, 36, 39, 41]

**14. Gametic chromosome number(s):**n=22 [4, 5, 6, 10, 11, 15, 17, 22, 24, 25, 26, 27, 29, 30, 31, 32, 33, 37, 38]

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

Image file

**16.Ploidy level:**Diploid (sexual) [4, 5, 6, 9, 10, 11, 15, 16, 17, 19, 20, 21, 22, 24, 25, 26, 27, 29, 30, 31, 32, 33, 34, 36, 37, 38, 39, 41]

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**22II4, 5, 6, 10, 11, 15, 17, 22, 24, 25, 26, 27, 29, 30, 31, 32, 33, 37, 38

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.):**