

## Species Data Sheet

DBT- Network Programme

Datasheet No. A-098.009.038  
(family.genus.species)

**1. Taxon:** *Fimbristylis* Vahl

Species: *Fimbristylis falcata* (Vahl) Kunth

Subspecies

Variety

Cultivar

Hybrid

Image file

**2. Synonyms:** *Iriafalcata* (Vahl) Kuntze, *Isolepis falcata* (Vahl) Roem. & Schult., *Scirpus falcatus* Vahl., *F. junciformis*

**3. Systematic position:**

**APG IV (2016)**

- Kingdom: Plantae
- Clade: Angiosperm
- Clade: Monocots
- Clade: Commelinids
- Order: Poales Small
- Family: Cyperaceae Juss.
- Genus: *Fimbristylis* Vahl
- Species: *F. falcata*

**Bentham and Hooker (1862)**

Kingdom: Plantae  
Division: Phanerogamia  
Class: Monocotyledones  
Series: Glumaceae  
Ordo: Cyperaceae Juss.  
Genus: *Fimbristylis* Vahl  
Species: *F. falcata*

**4. Distribution:**

**Global:** India, Nepal, Pakistan, Indo-China and Malesia

**India:** Kerala, Assam

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

**6. Threat Status:**

**IUCN:**

**BSI:**

**7. Habit and Habitat:** Herb

**8. Life Form:** Perennial

**9. Economic Importance:**

**10. Probable Progenitor of:** *Fimbristylis falcata*<sup>32</sup>

**11. DNA**

**C-value**

**Methodology:**

**12. Basic chromosome number(s):**  $x=5^{13,28} 11^{23,32} 12^{58}$

**13. Zygotic chromosome number(s):**  $2n=22^{7,24,25,29,30,32,58} 44^{32,34}$

**14. Gametic chromosome number(s):**  $n=11^{10,11,13,23,24,25,27,28,32,33} 22^{32}$

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

Image file

**16. Ploidy level:** Diploid<sup>23,58</sup> Tetraploid<sup>13,28,32</sup>

Image file

**17. Agamete ploidy:**

**18. Nature of polyploidy (auto, segmental, allo, autoallo):** Autotetraploidy<sup>32</sup>

**19. Genomic formula:**

**20. Aberrant chromosome number(s) (aneuploidy, aneusomy, polysomy):** Aneuploidy<sup>13</sup>

**21. Somatic chromosomes:**

**Karyotype:** Mostly metacentric and submetacentric<sup>32</sup>, Mostly submetacentric and metacentric<sup>27</sup>

**Chromosome size:** Medium size<sup>32</sup>, Medium size<sup>27</sup>

**NOR chromosome(s):** 4 NOR<sup>32</sup>, 8 NOR<sup>27</sup>

**Degree of asymmetry:** Symmetrical, Slightly Asymmetrical<sup>27</sup> (**Pollen mitosis**)

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:** 11II<sup>23,25,28</sup>; (8.48IV, 0.06II, 4.80II, 0.16I)<sup>32</sup>

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):** Pollen mitosis:  $n=11$ <sup>11,27</sup> 22<sup>32</sup>