Species Data Sheet

Datasheet No. A-098.009.026
(family.genus.species)

DBT- Network Programme

1.Taxon:*Fimbristylis* Vahl
Species:*Fimbristylis dichotoma*(L.) Vahl
Subspecies
Variety
Cultivar
Hybrid

Image file

2. Synonyms:*Eleocharis dichotoma* (L.) H.Karst., *Isolepis dichotoma* (L.) Kunth, *Scirpusdichotomus* L.*Fimbristylis diphylla*

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. dichotoma*

Bentham and Hooker (1862)
Kingdom: Plantae
Division:Phanerogamia
Class: Monocotyledones
Series: Glumaceae
Ordo: Cyperaceae Juss.
Genus: *Fimbristylis* Vahl
Species: *F.dichotoma*

4.Distribution:

Global: China, Japan and Indo-china

India: Assam, Gujarat, Madhya Pradesh, Punjab

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

6.Threat Status:

IUCN:

BSI:

7.Habit and Habitat: Herb

8.Life Form: Annual

9.Economic Importance:

10. Probable Progenitor of:

11.DNA

C-value **Methodology:**

12.Basic chromosome number(s):x=5[2,7,13,22,23,28,57]8[15]

13. Zygotic chromosome number(s):2n=10[1,2,5,6,19,22,23,24,45,47,51]12[50]20[1,2,3,6,7,8,21,22,24,25,26,29,45,47,48,53,57]30[7,22,23,24,45,47,48,52]32[15]

14. Gametic chromosome number(s):n=5[1,2,6,10,12,13,14,17,18,19,20,22,23,24,27,28]10[1,2,10,11,13,14,18, 21,22, 23,24,25,27,28,29]15[12,16,47,48]

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

Image file

16.Ploidy level: Diploid[2,6,13,18,20,22,23,25,28]Tetraploid[2,7,13,15,18,22,23,25,28,57]Hexaploid[25]

Image file

17.Agametoploidy:

18.Nature of polyploidy (auto, segmental, allo, autoallo): Euploidy[15]

19.Genomic formula:

20.Aberrant chromosome number(s)(aneuploidy, aneusomaty, polysomaty):

21.Somatic chromosomes:
;;;

Karyotype: Mostly metacentric[7], Mostly Submetacentric and metacentric[27]

Chromosome size: Small size[7], large size[27]

NOR chromosome(s):4NOR[7], 2NOR[27]

Degree of asymmetry: Highly Symmetrical[27]

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:5II[6,13,22,23,45,48];10II[13,22,23,25]

Image file

27.Chromosome distribution at anaphase I:10:10[23]

28. Genetic diversity:

Chromosomal level:

Image file

DNA level

29.Any other information (Apomixis; Inversion; Male sterility;Pollen grain mitosis; Pollen stainability;Translocationsetc): Pollen mitosis:n= 5[27]10[2,11,27]