

Species Data Sheet

DBT- Network Programme

Datasheet No. A-098.009.082
(family.genus.species)

1. Taxon: *Fimbristylis* Vahl

Species: *Fimbristylis quinquangularis* (Vahl) Kunth (*Accepted Name*)

Subspecies

Variety

Cultivar

Hybrid

Image file

2. Synonyms: *Iriaquinguangularis* (Vahl) Kuntze, *Scirpusquinguangularis* Vahl, *Trichelostylisquinguangularis* (Vahl) Nees

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. quinquangularis*

Bentham and Hooker (1862)

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

4. Distribution:

Global: Tropical Africa, Iraq to Tropical and Subtropical Asia and North Australia.

India: Near Bannerghatta and Bhadravati (Mysore State) and Assam.

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

6. Threat Status:

IUCN: Least Concern

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): $x=5^{2,7,13,22,23,28}$

13. Zygotic chromosome number(s): $2n=10^{1,2,3,4,7,45,48,55}20^{6,7}$

14. Gametic chromosome number(s): $n=5^{1,2,9,10,11,13,22,23,27,28,33,42,46,47}10^{14}$

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

Image file

16.Ploidy level:Diploid^{2,7,13,22,23,28}, Tetraploid⁷

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:Mostly metacentric and subtelocentric⁷, Mostly Submetacentric and metacentric²⁷

Chromosome size:Small size⁷, Medium Size²⁷

NOR chromosome(s):4NOR⁷, 2NOR²⁷

Degree of asymmetry:Asymmetrical, Symmetrical²⁷

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: $5II^{13,22,23,28}$

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: $(n=5)^{2,11}$