

Datasheet No. A-097.001
(Family.Genus)

DBT- Network Programme

1. Genus: *Juncus* L.

2. Systematic position:
APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Monocots
- Order: Poales Small
- Family: Juncaceae Juss.
- Genus: *Juncus* L.

Bentham and Hooker (1862)

- Kingdom: Plantae
- Division: Phanerogamia
- Class: Monocotyledones
- Series: Calycineae
- Ordo: Juncaceae Juss.
- Genus: *Juncus* L.

3. Species:

Global: 357

India: 34

4. Taxonomic riddles:

5. Distribution:

Global: Cosmopolitan

India: East and West Himalaya

6. Habit and Habitat: Rhizomatous herb; typically grow in cold or wet habitats, and in the tropics, are most common in montane environments

7. Economic Importance: Used as food, medicine and ornamentals

8. DNA content range:

2C (2.6-11.1 pg)¹

Methodology

Feulgen densitometry¹

9. Basic chromosome number(s):

10. Zygotic chromosome number(s): 2n=20²⁹; 2n=30¹⁴; 2n=34¹⁵; 2n=38⁵;
2n=40^{1,2,3,13,19,21,24,25,26,27,30,31,32,33,34,37}; 2n=42^{20,24}; 2n=44^{3,5,22,23,24,27}; 2n=48^{9,35,36}; 2n=50⁴¹;
2n=60^{12,16,39}; 2n=80^{1,3,4,5,6,7,8,9,17,26,27}; 2n=84^{5,23,24,40}; 2n=106¹⁸; 2n=108³; 2n=120^{16,19}; 2n=c 134⁴¹

11. Gametic chromosome number(s): n=22³⁸; n=38³⁸; n=30¹⁰; n=40^{11,12,13}; n=65¹⁷

12. Specialized chromosomes (B chromosomes/Sex chromosomes/Polytene Chromosomes/ Neocentric chromosomes):

13. Ploidy level: Tetraploid¹; octaploid¹

14. Nature of polyploidy (auto, segmental, allo, autoallo):

15. Aberrant chromosome number(s) (aneuploidy, aneusomaty, polysomaty): Variat chromosome numbers with $2n=27-36$, $2n=53-74$ and $2n=78-100$ ²⁰

16. Karyograms:

Meiosis:

17. Banding pattern(s):

18. Physical mapping of chromosomes:GISH:

19. Phylogenetic relationship at Chromosomal; DNA level: DNA level⁴²

20. Cytogenetic mechanism (s) underlying evolution:

21. Linkage map:

22. Any other information: Total number of species with reports = 10/34