

Species Datasheet

Datasheet No. A-078.010.020
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species: *Murdannia spirata* (L.) Brueck.

Subspecies:

Variety:

Cultivar:

Hybrid:

Image file

2. **Synonyms:** *Aneilema canaliculatum* Dalzell, *A. melanosticum* Hance, *A. nanum* (Roxb.) Kunth, *A. nummularia* Miq., *A. spiratum* (L.) Sweet, *A. spiratum* (L.) R. Br., *Aphylax spiralis* Salisb., *Commelina bracteolata* Lam., *C. nana* Roxb., *C. pumila* Royle ex C.B. Clarke, *C. spirata* L., *Murdannia spirata* var. *spirata*, *Phaeneilema spiratum* (L.) G.Brückn., *Streptylis bracteolata* (Lam.) Raf.

3. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Monocots
- Clade: Commelinids
- Order: Commelinales Mirb. ex Bercht. &

J. Presl

- Family: Commelinaceae Mirb.
- Genus: *Murdannia* Royle
- Species: *M. spirata* (L.) G.Brückn.

Bentham and Hooker (1862)

Kingdom: Plantae

Division: Phanerogamia

Class: Monocotyledones

Series: Coronarieae

Ordo: Commelinaceae Mirb.

Genus: *Murdannia* Royle

Species: *M. spirata* (L.) G.Brückn.

4. Distribution:

Global: Bangladesh, China, Hainan, Taiwan, India, Nepal, Myanmar, Sri Lanka, Philippines, Vietnam

India: Throughout India

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

6. Threat Status:

IUCN: [Least Concern](#)

BSI

7. **Habit and Habitat:** Herb. Very common annual found in wayside ditches, roadside, moist open places, in seasonal pool.

8. **Life Form:** Therophyte

9. **Economic Importance:** Leaves poultice relieves burns, itches, wounds.

10. **Probable Progenitor of:**

11. DNA

C-value

Methodology:

12. Basic chromosome number(s): $x=6^{12}$

13. Zygotic chromosome number(s): $2n=18^{27}20^{3,15,18}40^{1,12,13,15,17,18,22,24,33,36}$

14. Gametic chromosome number(s): $n=9^{27}10^{15}20^{1,2,3,12,14,15,18,24,31}$

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

Image file

16. Ploidy level:

Image file

17. Agametoploidy:

18. Nature of polyploidy (auto, segmental, allo, autoallo): Intraspecific polyploidy^{3, 15, 27}Euploidy²

19. Genomic formula:

20. Aberrant chromosome number(s) (aneuploidy, aneusomy, polysomy): Aneuploidy^{3, 15, 27}

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: 20II^{12}

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; Translocations etc.):