

Species Data Sheet

Datasheet No. A-078.010.017
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species: *Murdannianudiflora* (L.) Brenan

Subspecies:

Variety:

Cultivar:

Hybrid:

Image file

2. Synonyms: *Aneilema bracteolatum* var. *majus* Seub., *A. bracteolatum* var. *minus* Seub., *A. compressum* Dalzell, *A. debile* Wall., *Aneilema diandrum* Buch.-Ham. ex Wall., *A. diversifolium* Hassk., *A. foliosum* Hassk., *A. junghunianum* Miq., *A. lancifolium* Griff., *A. malabaricum* (L.) Merr., *A. minutum* (Blume) Kunth, *A. nudicaule* (Burm.f.) G. Don, *A. nudiflorum* (L.) Sweet, *A. nudiflorum* var. *compressum* (Dalzell) C.B. Clarke, *A. radicans* D. Don, *A. trichocoleum* Schauer, *Callisiaparvula* Brandegee, *Commelinachinensis* Osbeck, *C. diandra* Steud., *C. exilis* Steud., *C. minuta* Blume, *C. nudicaulis* Burm.f., *C. nudiflora* L., *C. nudiflora* f. *angustifolia* C.B. Clarke, *C. radicans* (D. Don) Spreng., *C. sellowii* Schtdl., *Cyanotisqueinzii* Hassk., *Ditelesianudiflora* (L.) Raf., *Murdannia malabarica* (L.) G. Brückn., *M. malabarica* var. *compressa* (Dalzell) Santapau & S.K. Jain, *Phaeneilema diversifolium* (Hassk.) G. Brückn., *P. malabaricum* (L.) V. Naray., *P. nudiflorum* (L.) G. Brückn., *Stickmanniaguayanensis* Raf., *S. longicollis* Raf., *Tradescantiacristata* Fern.-Vill., *T. malabarica* L.

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. nudiflora* (L.) Brenan

Bentham and Hooker (1862)

Kingdom: Plantae
Division: Phanerogamia
Class: Monocotyledones
Series: Coronarieae
Ordo: Commelinaceae Mirb.
Genus: *Murdannia* Royle
Species: *M. nudiflora* (L.) Brenan

4. Distribution:

Global: Tropical Asia to Malaysia, West Africa, Southeastern United States, and West Indies to Brazil

India: Throughout India

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

6. Threat Status:

IUCN

BSI

7. Habit and Habitat: Herb. Common along roadside, ditches, rocky outcrops with pools, marshy and swampy areas, open flats, stream margins, waste lands, in cultivation fields, full sun to partial shade

8. Life Form:

9. Economic Importance:

10. Probable Progenitor of:

11.DNA

C-value

Methodology:

12.Basic chromosome number(s): $x=4^{12}$

13. Zygotic chromosome number(s): $2n=20^{5,10,11,12,14,19,20,21,22,23,24,36,37}28^{15,18,41}35^{25}39^{25}42^{15,24}56^{15,18}$

14. Gametic chromosome number(s): $n=10^{3,7,12,20,21,23,24}15^{22}30^{26}$

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

Image file

16.Ploidy level:Diploid^{12,21}Triploid^{14,22}

Image file

17.Agametoploidy:

18.Nature of polyploidy (auto, segmental, allo, autoallo):Euploidy²

19.Genomic formula:

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

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: $10\text{II}^{3,12,21}$ $15\text{II}^{14,22}$

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.):