Species Data Sheet

Datasheet No. A-078.010.019 **DBT- Network Programme**
(family.genus.species)

1.Taxon:
Species:*Murdannia simplex* (Vahl) Brenan
Subspecies:
Variety:
Cultivar:
Hybrid:
Image file

2. Synonyms:*Aneilemacavaleriei* H.Lév. & Vaniot, *Aneilemalongifolium* Hook., *Aneilemarigidum* Blatt., *Aneilemasecundum* Wight, *Aneilema simplex* (Vahl) Kunth, *Aneilemasinicum* KerGawl, *Aneilemasinicum* var. *simplex* (Vahl) C.B.Clarke, *Commelinahookeri* A.Dietr., *Commelina longifolia* (Hook.) Spreng.,*Commelina simplex* Vahl, *C.sinica* (Ker Gawl.) Schult,*Murdanniasinica* (Ker Gawl.) G.Brückn, *M.stictosperma* Brenan, *Phaeneilemarigidum* (Blatt.) Raizada, *P.sinicum* (Ker Gawl.) G.Brückn.

3.Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Monocots
- Clade: Commelinids
- Order: CommelinalesMirb. exBercht. & J. Presl
- Family: Commelinaceae Mirb.
- Genus: *Murdannia* Royle
- Species: *M. simplex* (Vahl) Brenan

Bentham and Hooker (1862)
Kingdom: Plantae
Division: Phanerogamia
Class: Monocotyledones
Series: Coronarieae
Ordo: Commelinaceae Mirb.
Genus: *Murdannia* Royle
Species: *M. simplex* (Vahl) Brenan

4.Distribution:

Global: Tropical Asia, Tropical Africa, Madagascar and North Australia

India: Arunachal Pradesh, Karnataka,Kerala, Maharashtra, Meghalaya, Tamil Nadu

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

6.Threat Status:

IUCN: not been assessed yet

BSI

7.Habit and Habitat: Herb. In Shallow soil on rock crevices, it is commonly occur at high to medium altitude lateritic ranges of Western Ghats.

8.Life Form: Hemicryptophyte

9.Economic Importance:

10. Probable Progenitor of:

11.DNA

C-value **Methodology:**

12.Basic chromosome number(s):

13. Zygotic chromosome number(s):2n=20[42]40[6,8,15,30,32,36,37,43,44,45]60[1,15,26,27,28]80[7,15]

14. Gametic chromosome number(s):n=10[42]20[3,6,8,9,15,32,41]30[3,15,27]40[3,7,15]

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[2,3,15,27]Euploidy[2]

19.Genomic formula:

20.Aberrant chromosome number(s)(aneuploidy, aneusomaty, polysomaty): Aneuploidy[3,15,27]

21.Somatic chromosomes:

Karyotype:

Chromosome size: Very small[30]

NOR chromosome(s):6NOR[30]

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[6,8]

Image file

27.Chromosome distribution at anaphase I:20:20[6]

28. Genetic diversity:

Chromosomal level:

Image file

DNA level

29.Any other information (Apomixis; Inversion; Male sterility;Pollen grain mitosis; Pollen stainability;Translocations etc.):