

Species Datasheet

Datasheet No. A-377.001.021
(family.genus.species)

DBT- Network Progra

1.Taxon:

Species: *Andrographis paniculata* (Burn. f.) Wall.ex. Nees

Subspecies

Variety

Cultivar

Hybrid

Image file

2. **Synonyms:** *Andrographis paniculata* var. *glandulosa* Trimen, *Justicia latebrosa* Russell ex Wall., *J. paniculata* Burm.f.

3. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Eudicots
- Clade: Asterids
- Order: Lamiales Bromhead
- Family: Acanthaceae Juss.
- Genus: *Andrographis* Wall. ex Nees
- Species: *A.paniculata*(Burn.f.) Wall. ex. Nees

Bentham and Hooker(1862)

- Kingdom: Plantae
- Division: Phanerogamia
- Class: Dicotyledons
- Subclass:Gamopetalae
- Series: Bicarpellatae
- Cohors: Personales
- Ordo: AcanthaceaeJuss.
- Genus: *Andrographis* Wall. ex Nees
- Species: *A. paniculata*(Burn.f.) Wall. ex. Nees

4. Distribution:

Global: China, India, Indonesia Malaysia, Pakistan, Sri Lanka, and Thailand.

India: Kerala, Tamil Nadu.

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

6. Threat Status:

IUCN:

BSI:

7. **Habit and Habitat:** Herb, plains, hill slopes, growing in clay to sandy loamy soils.

8. **Life Form:** Chamaephytes

9. **Economic Importance:** Traditionally used for the treatment of common cold, diarrhoea, fever due to several infective cause, jaundice, as a health tonic for the liver and cardiovascular health, and as an antioxidant

10. Probable Progenitor of:

11.DNA

C-valueMethodology

12.Basic chromosome number(s):

13. Zygotic chromosome number(s): $2n=50^{4, 6,9,10}$

14. Gametic chromosome number(s): $n=25^{4, 5,6,10}$

15.Specialized chromosomes (B chromosomes/Sex chromosomes/Polytene chromosomes/ Neocentricchromosomesetc):

Image file

16.Ploidy level:

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-Majority metacentric/sub-metacentric⁶

Chromosome size-0.50 μm -1.75 μm ⁶

NOR chromosome(s)

Degree of asymmetry-Symmetrical⁶

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-25 II formations at MI^{4, 5, 6}

27. Chromosome distribution at anaphase I: 25-25 Separation of chromosome at AI^{4,5,6}

28. Genetic diversity:

Chromosomal level

DNA level-Yes^{11, 13, 14, 15, 16, 17, 18}

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