

Genus Datasheet

Datasheet No. A-377.012
(Family.Genus)

DBT- Network Programme

1. Genus: *Asystasia* Blume

2. Systematic position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Eudicots
- Clade: Superasterids
- Clade: Asterids
- Order: Lamiales Bromhead
- Family: Acanthaceae Juss.
- Genus: *Asystasia* Blume

Bentham and Hooker(1862)

- Kingdom: Plantae
- Division: Phanerogamia
- Class: Dicotyledons
- Subclass: Gamopetalae
- Series: Bicarpellatae
- Cohors: Personales
- Ordo: Acanthaceae Juss.
- Genus: *Asystasia* Blume

3. Species:

Global: 54

India: 9

4. Taxonomic riddles:

5. Distribution:

Global: South Africa, South West Asia, Sri Lanka, Tropical Africa, United States

India: Subtropical Himalayas, predominantly found in the East, North East India and Western Ghats.

6. Habit and Habitat: Herb or shrub, shady places and in undergrowth of moist deciduous forests to evergreen forests

7. Economic Importance: Medicinal

8. DNA content range:

2C

4C

Methodology:

9. Basic chromosome number(s):

10. Zygotic chromosome number (s): $2n=26^{1, 2, 3, 4, 5, 6, 11}$, $2n=28^{7, 8}$, $2n=66^{10}$

11. Gametic chromosome number (s): $n=13^{1, 2, 3, 4}$, $n=26^{1, 4, 9}$, $n=33^{10}$
12. Specialized chromosomes (B chromosomes/Sex chromosomes/Polytenechromosomes/ Neoc chromosomes):
13. Ploidy level:
14. Nature of polyploidy (auto, segmental, allo, autoallo):
15. Aberrant chromosome number(s) (aneuploidy, aneusomaty, polysomaty):
16. Karyograms: Meiosis:
17. Banding pattern(s):
18. Physical mapping of chromosomes: GISH:
19. Phylogenetic relationship at Chromosomal; DNA level: Chromosomal level^{5, 6, 7, 8}
20. Cytogenetic mechanism (s) underlying evolution: Genetic complexity in the genus *As* accompanied by a very small variation in chromosome number with most species were re somatic chromosome number of $2n=26$ and gametic chromosome number of $n=13$. The occi in *A. travancorica* Bedd (Verma and Dhillon, 1967) may suggest a species which is polyp showing aneupoloidy.
21. Linkage map:
22. Any other information: