

Species Datasheet

Datasheet No. A-377.012.005
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species: *Asystasia gangetica* (L.) T. Anderson

Subspecies

Variety

Cultivar

Hybrid

Image file

2. Synonyms: *Asystasia acuminata* Klotzsch, *A. bojeriana* Nees, *A. calycina* Nees, *A. comorensis* var. *humilis* Nees, *A. coromandeliana* Nees, *A. coromandeliana* Burkill & C...B. Clarke, *A. gangetica* subsp. *gangetica*, *A. gangetica* var. *mendeliana* S.R.Kundu & Mahua Pal, *A. intrusa* (Forssk.) Blume, *A. plumbaginea* Nees, *A. quarterna* Nees, *A. violacea* Dalzell, *Dyschoriste biloba* Hochst., *Justicia gangetica* L.,

3. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Eudicots
- Clade: Superasterids
- Clade: Asterids
- Order: Lamiales Bromhead
- Family: Acanthaceae Juss.
- Genus: *Asystasia* Blume
- Species: *A. gangetica* (L.) T. Anderson

Bentham and Hooker (1862)

- Kingdom: Plantae
- Division: Phanerogamia
- Class: Dicotyledons
- Subclass: Gamopetalae
- Series: Bicarpellatae
- Cohors: Personales
- Ordo: Acanthaceae Juss.
- Genus: *Asystasia* Blume
- Species: *A. gangetica* (L.) T. Anderson

4. Distribution:

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

India: Andaman Islands, Peninsular India

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

6. Threat Status:

IUCN:

BSI:

7. Habit and Habitat: Herb. Found in moist deciduous and sandy plains

8. Life Form: Chamaephytes

9. Economic Importance: Medicinal

10. Probable Progenitor of:

11. DNA

C- Value

Methodology

12. Basic chromosome number(s):

13. Zygotic chromosome number(s): $2n=26^{5,6}$ $2n=28^{7,8}$

14. Gametic chromosome number(s): $n=26^{1,4,9}$

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):
19. Genomic formula:
20. Aberrant chromosome number(s) (aneuploidy, aneusomaty, polysomaty):
21. Somatic chromosomes:

Karyotype –Majority metacentric and sub-metacentric⁸

Chromosome size -1.9µm to 2.0µm⁸

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

27. Chromosome distribution at anaphase I:

28. Genetic diversity:

Chromosomal level

DNA level

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