

Genus Datasheet

Datasheet No. A-377.024
(Family: Genus)

DBT- Network Progr

1. Genus: *Hemigraphis* Nees

2. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Eudicots
- Clade: Superasterids
- Clade: Asterids
- Order: Lamiales
- Family: Acanthaceae Juss.
- Genus: *Hemigraphis* Nees

Bentham and Hooker (1862)

- Kingdom: Plantae
- Division: Phanerogamia
- Class: Dicotyledons
- Subclass: Gamopetalae
- Series: Bicarpellatae
- Cohors: Personales
- Order: Lamiales
- Genus: *Hemigraphis* Nees

3. Species:

Global: 22

India: 9

4. Taxonomic riddles: Yes¹¹

5. Distribution:

Global: Ethiopia, Tanzania, Ghana, Nigeria, Cameroon, Central African Republic, Chad, Congo, USA, China, Taiwan, India, Malaysia.

India: Peninsular India, Upper Gangetic Plains

6. Habit and Habitat: Erect herb. Found mostly in grasslands.

7. Economic Importance: Medicinal

8. DNA content range:

Methodology:

2C

4C

9. Basic chromosome number(s): $x=7$ ⁵

10. Zygotic chromosome number(s): $2n=28^1$, $2n=30^2$, $2n=14^4$, $2n=28^5$, $2n=14^4$, $2n=28^5$, $2n=28^9$

11. Gametic chromosome number(s): $n=15^2$, $n=16^3$, $n=12^6$, $n=16^6$, $n=28^{7, 8}$

12. Specialized chromosomes (B chromosomes/Sex chromosomes/Polytene chromosomes/ Neocentric chromosomes):

13. Ploidy level: Tetraploid⁵

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^{4, 5, 7, 8}

20. Cytogenetic mechanism (s) underlying evolution: The diploid chromosome number in the genus *Hemigraphis* Nees ranges from $2n=14$ in *H. latebrosato* $2n=30$ in *H. hirta* with $2n=28$ being the most common chromosome number reported. Tetraploidy was presumed to be level of ploidy in *H. latebrosavar. rupestris* ($2n=28$, Sareen and Sanjokta, 1976).

21. Linkage map:

22. Any other information:

-