

## Genus Datasheet

### 1. Genus: *Andrographis* Wall. ex Nees

#### Bentham and Hooker(1862)

- Kingdom: Plantae
- Division: Phanerogamia
- Class: Dicotyledons
- Subclass: Gamopetalae
- Series: Bicarpellatae
- Cohors: Personales
- Ordo: Acanthaceae Juss.
- Genus: *Andrographis* Wall. ex Nees
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### 2. Systematic Position:

#### APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Eudicots
- Clade: Asterids
- Order: Lamiales Bromhead
- Family: Acanthaceae Juss.
- Genus: *Andrographis* Wall. ex Nees

### 3. Species:

**Global:** 32

**India:** 26

### 4. Taxonomic riddles: Yes<sup>11, 12, 17</sup>

### 5. Distribution:

**Global:** Australia, Bahamas, Cuba, Dominican Republic, Haiti, India, Jamaica, Laos, Malaysia, Myanmar, Nepal, Philippines, Jamaica, Sri Lanka, Vietnam,

**India:** Throughout but most species are endemic to Western Ghats.

**6. Habit and Habitat:** Erect herb or shrub, tropical to sub-tropical forests.

**7. Economic Importance:** *A. paniculata* is frequently used for preventing and treating the common cold and flu (influenza).

**8. DNA content range:**

Methodology:

2C

4C

**9. Basic chromosome number(s):**  $x=12^1$

**10. Zygotic chromosome number (s):**  $2n=24^1$ ,  $2n=30^6$ ,  $2n=38^7$ ,  $2n=48^{1, 8}$ ,  $2n=50^{4, 6, 9, 10}$

**11. Gametic chromosome number (s):**  $n=12^1$ ,  $n=15^6$ ,  $n=24^1$ ,  $n=25^{2, 3, 4, 5, 6, 10}$

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

13. Ploidy level: Diploid<sup>1, 4, 5, 6, 8, 10</sup>

14. Nature of polyploidy (auto, segmental, allo, autoallo):

15. Aberrant chromosome number(s) (aneuploidy, aneusomaty, polysomaty):

16. Karyograms: Majority metacentric and sub-metacentric<sup>1, 2, 3, 4, 5, 6, 7, 8, 9, 10</sup> Meiosis:  
Normal<sup>1, 5, 6, 10</sup>

17. Banding pattern(s):

18. Physical mapping of chromosomes: GISH:

19. Phylogenetic relationship at Chromosomal; DNA level: Chromosomal level<sup>1, 4, 5, 6, 8, 10</sup>

DNA level<sup>11, 12, 13, 14, 15, 16, 17, 18</sup>

20. Cytogenetic mechanism (s) underlying evolution: Evolution of genetic complexity in the genus *Andrographis* is accompanied by a small variation in chromosome number as well as chromosome size across species reported so far.

21. Linkage map:

22. Any other information:

