

# Genus Datasheet

Datasheet No. A-377.013  
(Family.Genus)

DBT- Network Programme

1. Genus: *Blepharis* Juss.

## 2. Systematic Position:

### APG IV (2016)

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

### Bentham and Hooker (1862)

- Kingdom: Plantae
- Division: Phanerogamia
- Class: Dicotyledons
- Subclass: Gamopetalae
- Series: Bicarpellatae
- Cohors: Personales
- Family: Acanthaceae Juss.
- Genus: *Blepharis* Juss.

## 3. Species:

**Global:** 126

**India:** 4

## 4. Taxonomic riddles:

## 5. Distribution:

**Global:** India, Myanmar, Sri Lanka and Tropical Africa

**India:** Peninsular India, Upper Gangetic plains and North West India.

**6. Habit and Habitat:** Erect herb / shrub. Found in tropical to sub-tropical forests.

**7. Economic Importance:** *B. scindica* is an important medicinal plant

## 8. DNA content range:

Methodology:

2C

4C

## 9. Basic chromosome number(s):

**10. Zygotic chromosome number (s):**  $2n=22^5$ ,  $2n=23^5$ ,  $2n=24^5$ ,  $2n=36^{1, 2}$ ,  $2n=34^{3, 4, 5}$

**11. Gametic chromosome number (s):**  $n=11^5$ ,  $n=17^{3, 5}$

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

13. Ploidy level: Diploid<sup>3, 4, 5</sup>

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

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

16. Karyograms: Metacentric and sub-metacentric<sup>1, 2, 3, 4, 5</sup>, Telocentric<sup>5</sup> Meiosis: Normal

17. Banding pattern(s):

18. Physical mapping of chromosomes: GISH:

19. Phylogenetic relationship atChromosomal; DNA level: Chromosomal level<sup>2, 3, 4, 5</sup>

DNA level

20. Cytogenetic mechanism (s) underlying evolution: In the genus *Blepharis* Juss, a variation number has been reported from  $2n=22$  to  $2n=34$  across species reported so far. There is a gametic chromosome number. The occurrence of telocentric chromosomes in *B. maderspate* rare instances in dicots thus, raises several important questions relating to the position, natur centromere during cell division.

21. Linkage map:

22. Any other information: