

Species Datasheet

Datasheet No. A-377.009.011
(family.genus.species)

DBT- N

1.Taxon:
Species:
Subspecies
Variety:*B. involucratar. elata*(Dalzell) C.B. Clarke
Cultivar
Hybrid
Image file

2. Synonyms:

3. Systematic Position:
APG IV (2016)
Kingdom: Plantae
Clade: Angiosperms
Clade: Eudicot
Clade: Asterids
Order: Lamiales Bromhead
Family: Acanthaceae Juss.
Genus: *Barleria* L.
Species: *B. involucratar. elata*(Dalzell) C.B. Clarke

Bentham and Hooker(1862)
Kingdom: Plantae
Division: Phanerogamia
Class: Dicotyledons
Subclass: Gamopetalae
Series: Bicarpellatae
Cohors: Personales
Ordo: Acanthaceae Juss.
Genus: *Barleria*L.
Species: *B. involucratar. elata*(Dalzell)
C.B. Clarke

4.Distribution:

Global:India
India: Western Ghats of Karnataka, Kerala, Maharashtra and Tamil Nadu.

5.Indigenous/Exotic/Endemic;Cultivated/Wild:Endemic to Peninsular India.

6.Threat Status:

IUCN:
BSI:

7.Habit and Habitat:Shrub. Growsalong roadsides at higher altitudes.

8.Life Form:Chamaephytes

9.Economic Importance: Medicinal.

10. Probable Progenitor of:

11.DNA
C-valueMethodology

12.Basic chromosome number(s):

13. Zygotic chromosome number(s): $2n=40^{2,4}$

14. Gametic chromosome number(s): $n=20^{2,4}$

15.Specialized chromosomes (B chromosomes/Sex chromosomes/Polytenechromosomes/Neocentric Chromosomes etc):

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 –12 long size (more than 4μm) metacentric chromosome, 7 long size sub-metacentric chromosome, 13 medium size (2.5 to 4μ) sub-metacentric chromosomes, 6 medium size (2.5 to 4μ) sub-terminal chromosomes and 2 medium size (2.5 to 4μ) chromosomes with satellites on the short arm⁴

Chromosome size-1.5μ to 4μm⁴

NOR chromosome(s)

Degree of asymmetry:Medium asymmetry⁴

Image

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: 20II⁴

27.Chromosome distribution at anaphase I:

28. Genetic diversity:

Chromosomal level

DNA level

29.Any other information:The presence of a pair of heteromorphic chromosomes is distinct in *B. involucrata* var. *elata*and showing longest chromosomes (up to 7μm) as compared to other species studied⁴