

Genus Datasheet

Datasheet No. A-140.083

DBT- Network Programme

1. Genus: Trigonella L.

2. Systematic position: APG; Bentham and Hooker:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Eudicots
- Clade: Rosids
- Order: FabalesBromhead
- Family: FabaceaeLindl.
- Subfamily: Faboideae Rudd
- Genus:Trigonella L.

Bentham and Hooker (1862)

Kingdom: Plantae
Division: Phanerogamia
Class: Dicotyledons
Subclass: Polypetalae
Series: Calyciflorae
Cohors: Rosales Bercht. & J. Presl
Ordo: LeguminosaeJuss.
Subordo: PapilionaceaeGiseke
Genus: Trigonella L.

3. Species:

In World: 135

In India: 10

4. Taxonomic riddles:

5. Distribution:

In World: Asia, Europe, India, Americas

In India:

6. Habit and Habitat:

7.Economic Importance: Medicinal values and Spices

8. DNA content range:Methodology:

4C DNA- (7.23 -12.420) pg

Feulgen Cytophotodensitometry^{1,2}

9. Basic chromosome number(s):

10. Zygotic chromosome number (s): $2n=16$ ^{1-12, 26,35, 36,37}

11. Gametic chromosome number (s): $n=8$ ^{4, 13, 27-34,37}

12. Specialized chromosomes (B chromosomes/Sex chromosomes/Ring chromosomes etc.):

B chromosomes¹⁴⁻¹⁸

13. Ploidy level: Diploid^{3, 4,7,8,12, 29, 30, 31, 37}

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

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

16. Cytogenetic mechanism (s) underlying evolution:

17. Banding pattern(s): C-banding^{20, 21}

18. Physical mapping of chromosomes: FISH: rRNA gene⁷

20. Phylogenetic relationship at

Chromosomal level

DNA level: 38, 39, 40

21. Linkage Map:

21. Any other information:

Species whose Chromosome numbers are yet to be found:

Trigonella fimbriata Benth

Trigonella gharensis Rech.f

Trigonella podperae (Sirj.) Vassilcz.

Trigonella uncata Boiss. & Noe