Species Datasheet

Datasheet No. A-140.083.003 (family.genus.species) **DBT- Network Programme**

1.Taxon:

Species : *Trigonellafoenumgraceum*L.
Subspecies
Variety
Cultivar
Hybrid

Image file

2. Synonyms:*Trigonellatibetana* (Alef.) Vassilcz.

3.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.
- Species:*Trigonellafoenumgraceum* 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.
Species: Trigonellafoenumgraceum L.

4.Distribution:

Global: Pakistan, Afghanistan, Nepal, Turkey, India

India

5.Indigenous/Exotic/Endemic;Cultivated/Wild: Cultivated

6.Threat Status:

IUCN

BSI

7.Habit and Habitat:

8.Life Form: Annual herb

9.Economic Importance: The plant is tonic, emollient, lactagogue, nutritive, stomachic, diuretic, carminative, emmenagogue, condiment, aphrodisiac, expectorant, antidiabetic, anabolic, appetizer, insect repellent. Used orally to treat cough, asthma, dysuria, constipation, hemorrhoids, diarrhea, gastrointestinal problems, impotency, backache, bladder & liver problems; and topically to treat tonsillitis, throat infections, swellings, abscesses, tumors and burns, scalp infection and dandruff and for hair and skin care & beauty. Fenugreek is a good sourse of sex hormones thus used for impotency and menopause

10. Probable Progenitor of:

11.DNA

C-value	**Methodology**
4C DNA - 7.23 - 9.12 pg	Feulgen Cytophotodensitometry[1]
4C DNA- 9.116p - 12.420 pg	Feulgen Cytophotodensitometry[2]

12.Basic chromosome number(s):

13. Zygotic chromosome number(s):2n=16[1-12]

14. Gametic chromosome number(s):n=8[4,13]

15.Specialized chromosomes (B chromosomes/Sex chromosomes/Polytene

Chromosomes/Neocentric chromosomes):B chromosomes[14-18]

16.Ploidy level: Diploid[3, 4, 7,8,12]

17.Agametoploidy:

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

19.Genomic formula:

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

21.Somatic chromosomes:[1,2,4,19]

Karyotype: Majority Metacentric and submetacentric chromosomes

Chromosome size: Large

NOR chromosome(s): 2

Degree of asymmetry: Symmetrical

22. Banding pattern(s):C-banding[20, 21]

23.Physical mapping of chromosomes:

In situ hybridization

Fluorescent in situhybridization:rRNA gene[7]

24.Genomic in situ hybridization:

25. Linkage map:

26.Chromosome associations:

Female meiosis

Male meiosis: 8 II[8]

27.Chromosome distribution at anaphase I:

28. Genetic diversity:

Chromosomal level: [1,2, 4]

DNA level:[22, 23,24,25]

29.Any other information (Apomixis; Inversion; Male sterility;Pollen grain mitosis; Pollen stainability; Translocationsetc):

Pollen stainability: 92.67%[8]