

Final Species Datasheet

Datasheet No. G-006.001.004 DBT- Network Programme
(Family.genus.species)

1. Taxon:

Species: *Ephedra gerardiana* var. *sikkimensis* Stapf

Subspecies:

Variety:

Cultivar:

Hybrid:

Image file

2. Synonyms: *Ephedra gerardiana* var. *congesta* C.Y.Cheng, *E. gerardiana* var. *saxatilis* Stapf, *E. saxatilis* (Stapf) Royle ex Florin, *E. saxatilis* var. *sikkimensis* (Stapf) Florin

3. Systematic Position:

Christenhusz et al. (2011)

- Class: Equisetopsida C. Agardh
- Subclass: Gnetidae Pax
- Order: Ephedrales Dumort.
- Family: Ephedraceae Dumort.
- Genus: *Ephedra* L.
- Species: *E. gerardiana* Wall. ex Stapf
- Variety: *E. gerardiana* var. *sikkimensis* Stapf

Bentham and Hooker (1862)

Kingdom: Plantae

Division: Phanerogamia

Class: Gymnospermeae

Ordo: Gnetaceae Blume

Genus: *Ephedra* L.

Species: *E. gerardiana* Wall. ex Stapf

Variety: *E. gerardiana* var. *sikkimensis* Stapf

4. Distribution:

Global: India, Bhutan, Nepal and South Tibet

India: Eastern Himalayan Region, Sikkim

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

6. Threat Status:

IUCN:

BSI:

7.Habit and Habitat:Shrub; found in rock

8.Life Form:Phanerophytes

9.Economic Importance:Knots which are used as fuel. Plants are suitable for rack gardens for their ornamental berries.

10. Probable Progenitor of:

11.DNA

C-valueMethodology

12.Basic chromosome number(s): $x=77,13$

13. Zygotic chromosome number(s): $2n=2813, 17$

14. Gametic chromosome number(s): $2n=14$ (pollen mitosis)¹³

15.Specialized chromosomes (B chromosomes/Sex chromosomes/Polytene chromosomes/Neocentric chromosomes):

Image file

16.Ploidy level:Tetraploid^{13, 17}

Image file

17.Agametoploidy:

18.Nature of polyploidy (auto, segmental, allo, autoallo):Allotetraploid¹⁷

19.Genomic formula:

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

21.Somatic chromosomes:¹³

Karyotype Media and subterminal chromosomes¹³

Chromosome sizeLarge¹³

NOR chromosome(s)

Degree of asymmetryAsymmetrical¹³

Image file

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

Image file

27.Chromosome distribution at anaphase I:

28. Genetic diversity:

Chromosomal level

Image file

DNA level

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