

Final Species Datasheet

Datasheet No. G-006.001.003
(family.genus.species)

1.Taxon:

Species: *Ephedra gerardiana* Wall. exStapf

Subspecies

Variety

Cultivar

Hybrid

Image file

2. Synonyms:

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. exStapf

Bentham and Hooker (1862)

Kingdom: Plantae

Division: Phanerogamia

Class: Gymnospermeae

Ordo: Gnetaceae Blume

Genus: *Ephedra* L.

Species: *E. gerardiana* Wall. exStapf

4.Distribution:

Global: Endemic to the mountains of [Afghanistan](#), [Bhutan](#), China, Northern [India](#), [Nepal](#), [Pakistan](#), [Sikkim](#), [Tajikistan](#), and [Tibet](#)

India: Jammu & Kashmir

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

6.ThreatStatus:

IUCN:

BSI:

7.Habit and Habitat:Low growing shrub; Abundant in inner Himalayan ranges on exposed sunny slopes at 2000-4500 m; exposed shingly slopes.

8.Life Form:Phanerophytes

9.Economic Importance:In [Ayurvedic medicine](#) its tea is used as medicine for colds, coughs, bronchitis, asthma, and arthritis

10. Probable Progenitor of:

11.DNA

C-value: Tetraploid cytotype 2C (31.88 pg)¹⁰

Methodology Feulgen microdensitometry¹⁰

12.Basic chromosome number(s): $x=7^{1,7,13}$

13. Zygotic chromosome number(s): $2n=14^{12,13,17}$

$28^{1,10,17,18}$

14. Gametic chromosome number(s): $n=7$ (female gametophyte mitosis)¹³

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

Image file

16.Ploidy level:Diploid ^{13,17}, Tetraploid ^{1,13,17}

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:^{1,13}

Karyotype Mostly median and subterminal^{1,13}

Chromosome size Large^{1,13}

NOR chromosome(s)

Degree of asymmetry Asymmetrical^{1,13}

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^{3,4,11,16}

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