Final Species Datasheet

Datasheet No. G-006.001.007
(family.genus.species)

1.Taxon:

Species: *Ephedra sinica* Stapf
Subspecies:
Variety:
Cultivar:
Hybrid:

Image file

2. Synonyms:*Ephedra flava* F.P.Sm., *E. ma-huang* Tang S.Liu

3. Systematic Position:

Christenhusz*et al.* (2011)

- Class: Equisetopsida C. Agardh
- Subclass: GnetidaePax
- Order: EphedralesDumort.
- Family:EphedraceaeDumort.
- Genus: *Ephedra* L.
- Species: *E. sinica*Stapf

Bentham and Hooker (1862)
Kingdom: Plantae
Division: Phanerogamia
Class: Gymnospermeae
Ordo: Gnetaceae Blume
Genus: *Ephedra* L.
Species: *E. sinica*Stapf

4.Distribution:

Global: Central Asia, distributed in south Siberia, Mongolia & China

India:

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

6.Threat Status:

IUCN: Least concern

BSI:

7.Habit and Habitat: Shrub, arid areas of highlands, 1600 m a.s.l, found in arid areas and highlands, occurring on slopes, dry river beds, sandy places, or fields on mountain sides. In the Russian Federation it is found in Stipa steppe habitat and occasionally in birch forests.

8.Life Form: Phanerophytes

9.Economic Importance: The stems of most members of this genus contain the alkaloid ephedrine and are valuable in the treatment of asthma and many other complaints of the respiratory system, and used in Chinese herbal medicine for thousands of years as a treatment for various ailments.

10. Probable Progenitor of:

11.DNA
C-valueMethodology

12.Basic chromosome number(s):x=7[7, 13]

13. Zygotic chromosome number(s):2n=28 [17]

14. Gametic chromosome number(s):n=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): Allotetraploid[17]

19.Genomic formula:

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

21.Somatic chromosomes:[13]

Karyotype Mediansubmedian and terminal chromosomes[13]

Chromosome size Large[13]

NOR chromosome(s)

Degree of asymmetry Asymmetrical[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[5, 8]

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