

Species Datasheet

Datasheet No. A-061.073.008
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species: *Platanthera edgeworthii* (Hook.f. ex Collett) R.K. Gupta

Subspecies:

Variety:

Cultivar

Hybrid

Image file

2. Synonyms:

Habenaria edgeworthii Hook.f. ex Collett

Habenella edgeworthii (Hook.f. ex Collett) Szlach. & Kras-Lap.

Platantheroides edgeworthii (Hook.f. ex Collett) Szlach.

3. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Monocots
- Order: Asparagales Link
- Family: Orchidaceae Juss.
- Subfamily: Orchidoideae
- Tribe: Orchideae
- Subtribe: Orchidinae
- Genus: *Platanthera* Rich.
- Species: *Platanthera edgeworthii* (Hook.f. ex Collett) R.K. Gupta

4. Distribution:

Global: India (western and eastern Himalayas), Pakistan, Nepal in scrub on open hillsides at elevations of 1200 to 3600 m

India: Commonly distributed in Himalayas

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

6. Threat Status:

IUCN:

BSI:

7.Habit and Habitat:Terrestrial tuberous herb, grows on open grassy slopes or in forests at 2100-2300m

8.Life Form:Cryptophytes

9.Economic Importance:Medicinal, leaves and roots used in blood disorders

10. Probable Progenitor of:

11.DNA

C-value Methodology

2C (15.38 pg)¹⁹ Feulgen microdensitometry¹⁹

12.Basic chromosome number(s): $x=21$ ^{1, 8, 11, 12, 15, 16, 18, 19, 22, 27, 28, 29}

13. Zygotic chromosome number(s): $2n=42$ ^{1, 8, 11, 12, 15, 16, 18, 19, 22, 27, 28, 29} ,

⁸⁴^{8, 13, 15, 23, 26, 27}

14. Gametic chromosome number(s): $n=21$ ^{1, 7, 8, 12, 15, 18, 22, 29} , ⁴²^{7, 8, 13, 15, 22, 23, 26, 27}

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

Image file

16.Ploidy level:Diploid^{1, 7, 8, 11, 12, 15, 16, 18, 19, 22, 27, 28, 29}, Tetraploid^{7, 8, 13, 15, 22, 23, 26, 27}

Image file

17.Agametoploidy:

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

19.Genomic formula:

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

21.Somatic chromosomes:Cytotype $2n=42$ ^{7, 8, 15}

Cytotype $2n=84$ ^{7, 8, 15}

KaryotypeMedian, submedian, 2 pairs subterminal^{7, 8, 15}

Chromosome sizeSmall^{7, 8, 15}

NOR chromosome(s)

Degree of asymmetrySymmetrical^{7, 8, 15}

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 Diploid: 21 II ^{7, 8, 15, 22},

Tetraploid : 42 II ^{7, 8, 15, 22}

Image file

27. Chromosome distribution at anaphase I:

28. Genetic diversity:

Chromosomal level

Image file

DNA level

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