

Species Datasheet

Datasheet No. A-061.091.001
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species: *Satyriumnepalense* D. Don

Subspecies:

Variety:

Cultivar

Hybrid

Image file

2. Synonyms: *Satyriumalbiflorum* A. Rich., *Satyriumhenryi* Schltr., *Satyriumnepalense* f. *albiflorum* (A. Rich.) Tuyama, *Satyriumpallidum* A. Rich., *Satyriumperrottetianum* A. Rich., *Satyrium wightianum* Lindl.

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: *Satyrium* Sw.
- Species: *Satyrium nepalense* D. Don

Bentham and Hooker (1862)

Kingdom: Plantae
Division: Phanerogamia
Class: Monocotyledonae
Series: Microspermae
Ordo: Orchideae
Tribus: Ophrydeae
Subtribus: Habenariaeae
Genus: *Satyrium* Sw.
Species: *Satyrium nepalense* D. Don

4. Distribution:

Global: China South-Central, China Southeast, India, Myanmar, Nepal, Pakistan, Sri Lanka, Thailand, Tibet

India: Andhra Pradesh, Arunachal Pradesh, Himachal Pradesh, Jammu and Kashmir, Karnataka, Kerala, Manipur, Meghalaya, Nagaland, Sikkim, Tamil Nadu, Uttarakhand, West Bengal

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

6. Threat Status:

IUCN:

BSI:

7. Habit and Habitat: Cool to cold growing terrestrial tuberous orchid, growing in open grassy slopes or in forests

8. Life Form: Cryptophytes

9. Economic Importance: Cultivated ornamental, medicinal, tubers used as tonic, diarrhoea and malaria, tuber edible

10. Probable Progenitor of:

11.DNA

C-value Methodology

12.Basic chromosome number(s): $x=41^{2, 7, 8, 9, 10, 13, 14}$

13. Zygotic chromosome number(s): $2n=82^{2, 7, 9, 14}$,

$123^{7, 12}$,

$164^{3, 4, 5, 6, 11, 13}$

14. Gametic chromosome number(s): $n=41^{2, 7, 8, 10, 13}$, $82^{4, 5, 9, 11}$

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

Image file

16.Ploidy level:Diploid $^{2, 7, 8, 9, 10, 13, 14}$

Triploid $^{7, 12}$

Tetraploid $^{3, 4, 5, 6, 9, 11, 13}$

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: 5

Karyotype Median 5

Chromosome size Small to medium 5

NOR chromosome(s)

Degree of asymmetry Symmetrical 5

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 $2n=82$; 41II^{8, 9, 10}, one of the IIs associated with nucleolus¹⁰

Tetraploid $2n=164$; 82II^{4, 5, 9}

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.):