

Species Datasheet

Datasheet No. A-073.002.034
(family.genus.species)

DBT- Network Programme

-

1. Taxon:

Species *Allium stracheyi* Baker

Subspecies

Variety

Cultivar

Hybrid

Image file

2. Synonyms: *Allium longistaminum* Royle

3. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Monocots
- Order: Asparagales Link
- Family: Amaryllidaceae J. St.-Hil.
- Subfamily: Allioideae Herb.
- Genus: *Allium* L.
- Species: *A. stracheyi* Baker

Bentham and Hooker (1862)

Kingdom: Plantae
Division: Phanerogamia
Class: Monocotyledones
Series: Coronarieae
Ordo: Liliaceae Juss.
Genus: *Allium* L.
Species: *A. stracheyi* Baker

4. Distribution:

Global: India, Nepal, Pakistan, West Himalaya

India: Himachal Pradesh, Jammu and Kashmir, Uttaranchal, West Himalaya

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

6. Threat Status:

IUCN:

BSI:

7. Habit and Habitat: Herbaceous, height ~20-30 cm; on dry open slopes or among rocky boulders, near streams or as an undergrowth in *Pinus- Cedrus* forests, between 2000 m – 3800 m altitude.

8. Life Form: Bulbous geophyte.

9. Economic Importance: Extensively used as a spice and curry powder

10. Probable Progenitor of:

11. DNA

C- value

Methodology

12. Basic chromosome number(s): $x=8$ ⁵

13. Zygotic chromosome number(s): $2n= 16$ ^{6,10,13,38}
 $2n= 14$ ^{7,23,83,295}
 $2n= 32$ ⁷
 $2n= 48$ ^{7,31}

14. Gametic chromosome number(s): $n=8$ ^{5,296}

15. Specialized chromosomes (B chromosomes/Sex chromosomes/Polytene chromosomes/Neocentric chromosomes): B chromosomes (1)⁶, (2-10)^{83,295}

Image file

16. Ploidy level: Diploid^{5,6}

Image file

17. Agametoploidy:

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

19. Genomic formula:

20. Aberrant chromosome number(s) (aneuploidy, aneusomy, polysomy): $2n=44$ ³¹

21. Somatic chromosomes:

Karyotype Majority metacentric chromosomes ^{6,23}

Majority sub-metacentric chromosomes ³⁸

Chromosome size Medium to large ^{6,38}, large ²³

NOR chromosome(s)

Degree of asymmetry:

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 8 II⁵, weak desynaptic⁵

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; Translocations etc): Pollen stainability (%): 95%⁵