

Species Datasheet

Datasheet No. A-073.002.037
(family.genus.species)

DBT- Network Programme

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1. Taxon:

Species *Allium wallichii* Kunth

Subspecies

Variety

Cultivar

Hybrid

Image file

2. Synonyms: *Allium bulleyanum* Diels, *A. bulleyanum* var. *tchongchanense* (H.Lev.) Airy Shaw, *A. caeruleum* Wall., *A. feddei* H.Lev., *A. liangshanense* Z.Y.Zhu, *A. polyastrum* Diels, *A. praelatitium* H.Lev., *A. tchongchanense* H.Lev., *A. violaceum* Wall. ex Regel, *A. wallichianum* Steud., *A. wallichii* var. *albidum* F.T. Wang & T. Tang; *A. wallichii* var. *wallichii*, *Nothoscordum mairei* H.Lev.

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. wallichii* Kunth

Bentham and Hooker (1862)

Kingdom: Plantae
Division: Phanerogamia
Class: Monocotyledones
Series: Coronarieae
Family: Liliaceae Juss.
Genus: *Allium* L.
Species: *A. wallichii* Kunth

4. Distribution:

Global: Bhutan, China, India, Nepal, Tibet

India: Assam, Jammu and Kashmir, Meghalaya, Sikkim, Uttaranchal,

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

6. Threat Status:

IUCN:

BSI:

7. Habit and Habitat: Herbaceous, height ~40-65 cm; Temperate, besides running water, hilly slopes or rocky areas in open conifer forests, between 2800 m and 3625 m altitude.

8. Life Form: Bulbous geophyte.

9. Economic Importance: Vegetable, Cooked with fried fish or roasted meat for flavoring.

10. Probable Progenitor of:

11. DNA

C- value	Methodology
2C (32.49 pg) ^{3,4}	Feulgen Cytophotometry ^{3,4}
2C (30.45 pg) ³	Feulgen microdensitometry ⁹⁸
4C (64.98±0.76 pg) ^{3,4}	
4C (121.79±1.41 pg) ³	
4C (119.13±0.96pg) ⁹⁸	

12. Basic chromosome number(s): $x=7$ ¹⁹⁹

13. Zygotic chromosome number(s): $2n=14$ ^{3,4,199}
 $2n=28$ ^{3,98,199}
 $2n=32$ ²²⁴

14. Gametic chromosome number(s):

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

Image file

16. Ploidy level: Diploid^{3,4,199}, Tetraploid^{3,98,199}

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:

Karyotype Majority submetacentric chromosomes ¹⁹⁹

Chromosome size

NOR chromosome(s) 2 NOR ¹⁹⁹

Degree of asymmetry: Stebbins 2A category ¹⁹⁹

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

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