

Species Datasheet

Datasheet No. A-073.002.036
(family.genus.species)

DBT- Network Programme

-

1. Taxon:

Species *Allium victorialis* L.

Subspecies

Variety

Cultivar

Hybrid

Image file

2. Synonyms: *Allium anguinum* Bubani, *A. convallarifolium* Pall. ex Ledeb., *A. longibulbum* Dulac, *A. microdictyum* Prokh., *A. plantaginense* Willk. & Lange, *A. plantagineum* Lam., *A. reticulatum* St.-Lag., *Anguinum victorialis* (L.) Fourr., *Berenice victorialis* (L.) Salisb., *Cepa victorialis* (L.) Moench, *Geboscon lanceolatum* Raf., *G. triphylum* Raf., *Loncostemon victoriale* (L.) Raf.

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. victorialis* L.

Bentham and Hooker (1862)

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

4. Distribution:

Global: Bhutan, China, Europe, India, Japan, Myanmar, Nepal, North America, Pakistan,

India: Himachal Pradesh, Jammu and Kashmir, Sikkim, Uttaranchal,

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

6. Threat Status:

IUCN: Not been assessed yet

BSI:

7. Habit and Habitat: Herbaceous, height ~15 to 45 cm; On river banks or near glacier, open grassy land amongst bushes, between 2100 m to 4100 m altitude.

8. Life Form: Perennial, bulbous geophyte.

9. Economic Importance: Leaves used for seasoning curries; used as carminative in W. Garhwal

10. Probable Progenitor of:

11. DNA

C- value

4C (86.42±1.41pg) ⁹⁸

Methodology

Feulgen microdensitometry ⁹⁸

12. Basic chromosome number(s): $x = 8$ ^{5,38}

13. Zygotic chromosome number(s): $2n = 16$ ^{6,10,38,98,231,290,293}

$2n = 32$ ^{290,294}

$2n = 36$ ^{7,31}

14. Gametic chromosome number(s): $n = 8$ ⁵

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

Image file

16. Ploidy level: Diploid ^{5,6,38,98}

Image file

17. Agametoploidy:

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

19. Genomic formula:

20. Aberrant chromosome number(s) (aneuploidy, aneusomy, polysomy): Polysomy with $2n=72$ ³¹

21. Somatic chromosomes:

Karyotype Majority metacentric chromosomes ⁶ or majority sub-metacentric chromosomes³⁸, shows karyotypic polymorphism ⁶, majority chromosome pairs heteromorphic ³⁸

Chromosome size Large to very large ^{6,38}

NOR chromosome(s) 2 NOR ³⁸

Degree of asymmetry:

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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 II ⁵

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 (%): 100% ⁵