Species Datasheet

Datasheet No. A-073.002.031 **DBT- Network Programme**
(family.genus.species)

1. Taxon:

Species *Allium schoenoprasum* L.
Subspecies
Variety
Cultivar
Hybrid

Image file

2. Synonyms: *Allium acutum* Spreng., *A. alpinum* (DC.) Hegetschw., *A. broteroi* Kunth, *A. buhseanum* Regel, *A. carneum* Schult. & Schult.f., *A. coloratum* Dulac, *A. foliosum* Clairv. ex DC., *A. glaucum* DC., *A. glaucum* Ledeb., *A. idzuense* H.Hara, *A. lusitanicum* Link ex Regel, *A. montanum* Schrank, *A. palustre* Chaix, *A. palustre* Salisb., *A. palustre* Pourr. ex Lag., *A. punctulatum* Schltdl., *A. purpurascens* Losa, *A. raddeanum* Regel, *A. reflexum* F.Dietr., *A. riparium* Opiz, *A. roseum* Krock., *A. schmitzii* var. *duriminium* Cout., *A. schoenoprasum* var. *albidum* Regel, *A. schoenoprasum* f. *albiflorum* J.Rousseau, *A. schoenoprasum* var. *alpinum* DC., *A. schoenoprasum* subsp. *alpinum* (DC.) Nyman, *A. schoenoprasum* var. *alvarense* Hyl., *A. schoenoprasum* var. *brevispathum* Regel, *A. schoenoprasum* var. *broteroi* (Kunth) Nyman, *A. schoenoprasum* var. *buhseanum* (Regel) Boiss., *A. schoenoprasum* var. *caespitans* Ohwi, *A. schoenoprasum* var. *duriminium* (Cout.) Cout., *A. schoenoprasum* var. *foliosum* (Clairv. ex DC.) Mutel, *A. schoenoprasum* var. *idzuense* (H.Hara) H.Hara, *A. schoenoprasum* var. *laurentianum* Fernald, *A. schoenoprasum* var. *lusitanicum* Nyman, *A. schoenoprasum* subsp. *orosiae* J.M.Monts., *A. schoenoprasum* subsp. *pumilum* (Bunge) K.Richt., *A. schoenoprasum* var. *pumilum* Bunge, *A. schoenoprasum* f. *purpuratum* Konta, *A. schoenoprasum* subsp. *riparium* (Opiz) Celak., *A. schoenoprasum* subsp. *schoenoprasum*, *A. schoenoprasum* var. *schoenoprasum*, *A. schoenoprasum* var. *sibiricum* (L.) Garcke, *A. schoenoprasum* subsp. *sibiricum* (L.) Syme, *A. schoenoprasum* var. *sibiricum* (L.) Hartm., *A. scorodoprasum* var. *alvarense* Hyl., *A. sibiricum* L., *A. sibiricum* var. *schoenoprasoides* (Fr.) Fr., *A. tenuifolium* Salisb., *A. tenuifolium* Pohl, *A. ubinicum* Kotukhov, *A. udinicum* Antsupova, *Ascalonicum schoenoprasum* (L.) P.Renault, *Cepa schoenoprasa* (L.) Moench, *C. tenuifolia* (Salisb.) Gray, *Porrum schoenoprasum* (L.) Schur, *P. sibiricum* (L.) Schur, *Schoenissa rosea* Salisb., *S. schoenoprasa* (L.) Salisb., *Schoenoprasum vulgare* Fourr.

3. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms

Bentham and Hooker (1862)
Kingdom: Plantae
Division: Phanerogamia

- Clade: Monocots
- Order: Asparagales Link
- Family: Amaryllidaceae J. St.-Hil.
- Subfamily: Allioideae Herb.
- Genus: *Allium* L.
- Species: *A. schoenoprasum* L.

Class: Monocotyledones
Series: Coronarieae
Ordo: Liliaceae Juss.
Genus: *Allium* L.
Species: *A. schoenoprasum* L.

4. Distribution:

Global: Asia, Europe, North America

India: Jammu and Kashmir and Himachal Pradesh

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

6. Threat Status:

IUCN: Not been assessed yet

BSI:

7. Habit and Habitat: Herbaceous, height~ 20-35 cm; on rocky ground between 3000 m -3900 m altitude.

8. Life Form: Bulbous geophyte

9. Economic Importance: Vegetable, salad and condiment

10. Probable Progenitor of:

11. DNA

C- value	Methodology
2C (18.86 pg) [3,4]	Feulgen Cytophotometry
[3,4]	
4C (37.73±0.94 pg)[3,4]	
4C (31.20pg)[79]	

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

13. Zygotic chromosome number(s): 2n= 14 [168]

2n= 16 [3,4,6,9,34,45,79,86,92,123,247,269,270,271,272,273,274,275,276,277,278,279,280]

2n= 24 [273]

2n= 32 [86,123,231,272,281,282]

2n= 48 [283]

14. Gametic chromosome number(s): n= 8 [5,231,269,277]

15. Specialized chromosomes (B chromosomes/Sex chromosomes/Polytene chromosomes/Neocentric chromosomes): B chromosomes (1-9) [279], (2-10)[276], (2) [277]

Image file

16. Ploidy level: Diploid [3,5,6,34,79,276,279]

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 metacentric chromosomes [6,34,276], shows karyotypic polymorphism [6]

Chromosome size Medium [6,34,276] or large to very large [34]

NOR chromosome(s) 1-6 NOR [34]

Degree of asymmetry: Stebbin's 2B category [34]

Image file

22. Banding pattern(s): C-banding [276,279]

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: Mostly normal [5]

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], 95.9% [280]