

Species Datasheet

Datasheet No. A-073.002.001
(family.genus.species)

DBT- Network Programme

-

1. Taxon:

Species *Allium ascalonicum* L.

Subspecies

Variety

Cultivar

Hybrid

Image file

2. Synonyms: *Allium carneum* Willd., *A. fissile* Gray, *A. hierochuntinum* Boiss., *Cepa ascalonica* (L.) Garsault, *Porrum ascalonicum* (L.) Rehb.

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. ascalonicum* L.

Bentham and Hooker (1862)

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

4. Distribution:

Global: Arabia, Arabian, Egypt, Libya, Palestine, Peninsula Saudi, Sinai, Turkey, Western Asia Lebanon-Syria

India:

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

6. Threat Status:

IUCN: Not been assessed yet

BSI:

7. Habit and Habitat: Herb; Mediterranean Forest, woodlands and Scrub

8. Life Form: Bulbous geophyte

9. Economic Importance: Culinary, possesses antibacterial and anti-inflammatory properties

10. Probable Progenitor of:

11. DNA

C- value

4C (66.32-68.67 pg)¹

Methodology

Feulgen cytophotometry¹

12. Basic chromosome number(s): $x = 8^{84}$

13. Zygotic chromosome number(s): $2n = 16^{1,2,13,85,86,87,88,89,90,91,92,93, 94,95}$

14. Gametic chromosome number(s): $n = 8^{96,97}$

15. Specialized chromosomes (B chromosomes/Sex chromosomes/Polytene chromosomes/Neocentric chromosomes): B chromosome (1)⁹⁴

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16. Ploidy level: Diploid^{1,2,94}

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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 to sub-metacentric chromosomes^{2,86}

Majority sub-metacentric chromosomes⁸⁹

Chromosome size

NOR chromosome(s) 2 NOR^{2,84,89}

Degree of asymmetry:

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22. Banding pattern(s): Giemsa C-banding⁹³

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):