Species Datasheet

Datasheet No. A-073.002.002 **DBT- Network Programme**
(family.genus.species)

1. Taxon:

Species *Allium atropurpureum* Waldst. & Kit.
Subspecies
Variety
Cultivar
Hybrid

Image file

2. Synonyms: *Allium nigrum* var. *atropurpureum* (Waldst. & Kit.) Vis.

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. atropurpureum* Waldst. & Kit.

Bentham and Hooker (1862)
Kingdom: Plantae
Division: Phanerogamia
Class: Monocotyledones
Series: Coronarieae
Ordo: Liliaceae Juss.
Genus: *Allium* L.
Species: *A. atropurpureum* Waldst. & Kit.

4. Distribution:

Global: Europe Hungary, Romania, Southeastern Europe Bulgaria, Turkey-in-Europe, Western Asia Turkey, Yugoslavia

India: Western Himalaya, Kashmir

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

6. Threat Status:

IUCN: Not yet been assessed

BSI:

7. Habit and Habitat: Herbaceous, height ~ 40-100 cm; cultivated in dry open ground

8. Life Form: Bulbous geophyte.

9. Economic Importance:

10. Probable Progenitor of:

11. DNA

C- value	Methodology
2C (28.20 pg)[3,4]	Feulgen cytophotometry[3,4]
2C (52.24±0.05pg)[99]	Flow cytometry[99]
4C (112.81 ±1.23 pg)[3,4]	Microdensitometry[98]
4C (113.66±1.33pg)[98]	

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

13. Zygotic chromosome number(s): 2n= 16[5,6,7,13,14,45,98,99,100,101,102]

2n= 32[3,4,99]

14. Gametic chromosome number(s): n= 8[5,15]

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

Image file

16. Ploidy level: Diploid[5,6,7]

Tetraploid[3,4]

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]

Chromosome size Large to very large[6]

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 II[5,15]

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]