

Species Datasheet

Datasheet No. A-074.001.008
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species *Drimia razii* Ansari
Subspecies
Variety
Cultivar
Hybrid

Image file

2. **Synonyms:** *Indurgia razii* (Ansari) Speta, *Thuranthos razii* (Ansari) Speta, *Urginea razii* (Ansari) Deb & Dasgupta

3. Systematic Position:

Bentham and Hooker (1862)

Kingdom: Plantae
Division: Phanerogamia
Class: Monocotyledones
Series: Coronarieae
Ordo: Liliaceae Juss.
Genus: *Drimia* Jacq.
Species: *Drimia razii* Ansari

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Monocots
- Order: Asparagales Link
- Family: Asparagaceae Juss.
- Subfamily: Scilloideae Burnett
- Genus: *Drimia* Jacq.
- Species: *Drimia razii* Ansari

4. Distribution:

Global: India

India: Maharashtra

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

6. Threat Status:

IUCN: Critically Endangered

BSI:

7. **Habit and Habitat:** Scapigerous bulbous herb; grows on rocky hill slopes and hill tops.

8. **Life Form:** Bulbous geophytes.

9. **Economic Importance:** Bulb contains cardiac glycosides, i. e. Bufadienolides.

10. **Probable Progenitor of:**

11. **DNA**

C- value

2C (21.50 pg)²

Methodology

Flow Cytometry²

12. **Basic chromosome number(s):**

13. **Zygotic chromosome number(s):** 2n= 20^{2, 15, 21, 29}

14. Gametic chromosome number(s): $n=10$ ¹⁵

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

Image file

16. Ploidy level: Diploid^{2, 15, 21, 29}

Image file

17. Agametoploidy

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

19. Genomic formula:

20. Aberrant chromosome number(s) (aneuploidy, aneusomy, polysomy):

21. Somatic chromosomes:

Karyotype Majority subtelocentric chromosomes^{2, 15, 21, 29}

Chromosome size Small to large^{2, 15}

NOR chromosome(s) 2 NOR²

Degree of asymmetry: Stebbin's 2b class¹⁵; Stebbin's 1b class^{2, 21}

Image file

22. Banding pattern(s): Fluorescent banding by CMA/ DAPI staining²

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 10II¹⁵

Image file

27. Chromosome distribution at anaphase I: Normal¹⁵

28. Genetic diversity:

Chromosomal level²

Image file

DNA level^{29, 43}

29. Any other information (Apoxyis; Inversion; Male sterility; Pollen grain mitosis; Pollen stainability; Translocations etc): Pollen stainability: (92- 98%)¹⁵