

# Species Datasheet

Datasheet No. A-074.001.004  
(family.genus.species)

DBT- Network Programme

## 1. Taxon:

Species *Drimia nagarjuna* (Hemadri & Swahari) Anand Kumar

Subspecies

Variety

Cultivar

Hybrid

Image file

2. **Synonyms:** *Urginea nagarjuna* Hemadri & Swahari

## 3. Systematic Position:

### Bentham and Hooker (1862)

Kingdom: Plantae

Division: Phanerogamia

Class: Monocotyledones

Series: Coronarieae

Ordo: Liliaceae Juss.

Genus: *Drimia* Jacq.

Species: *D. nagarjuna* (Hemadri & Swahari) Anand Kumar

### APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Monocots
- Order: Asparagales Link
- Family: Asparagaceae Juss.
- Subfamily: Scilloideae Burnett
- Genus: *Drimia* Jacq.
- Species: *D. nagarjuna* (Hemadri & Swahari) Anand Kumar

## 4. Distribution:

**Global:** India.

**India:** Andhra Pradesh, Kerala.

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

## 6. Threat Status:

**IUCN:**

**BSI:**

7. **Habit and Habitat:** Bulbous herb, Tropical Dry Forest

8. **Life Form:** bulbous geophytes

9. **Economic Importance:** *D. nagarjuna* bulbs are rich in bioactive compounds responsible for anticancer activity.

10. **Probable Progenitor of:**

## 11. DNA

**C- value**

2C (23.96 pg)<sup>1</sup>

**Methodology**

Flow Cytometry<sup>1</sup>

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

13. **Zygotic chromosome number(s):** 2n= 20<sup>1, 21, 36, 37</sup>

14. **Gametic chromosome number(s):** n= 10<sup>37</sup>

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

Image file

**16. Ploidy level:** Diploid<sup>1, 21, 37</sup>

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 subtelocentric chromosomes<sup>21, 37</sup>

**Chromosome size** Small to very large<sup>37</sup>

**NOR chromosome(s)** 2 NOR<sup>37</sup>

**Degree of asymmetry:** Moderately symmetrical<sup>37</sup>; Stebbin's 1b class<sup>21, 37</sup>

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** 10II<sup>37</sup>

Image file

**27. Chromosome distribution at anaphase I:** Normal<sup>37</sup>; Stickiness<sup>37</sup>

**28. Genetic diversity:**

**Chromosomal level**

Image file

**DNA level**

**29. Any other information (Apomixis; Inversion; Male sterility; Pollen grain mitosis; Pollen stainability; Translocations etc):**