

# Species Datasheet

Datasheet No. A-074.001.005  
(family.genus.species)

DBT- Network Programme

## 1. Taxon

Species *Drimia polyantha* (Blatt. & McCann) Stearn

Subspecies

Variety

Cultivar

Hybrid

Image file

2. **Synonyms:** *Indurgia polyantha* (Blatt. & McCann) Speta, *Thuranthos polyanthus* (Blatt. & McCann) Speta, *Urginea polyantha* Blatt. & McCann

## 3. Systematic Position:

### Bentham and Hooker (1862)

Kingdom: Plantae

Division: Phanerogamia

Class: Monocotyledones -

Series: Coronarieae

Ordo: Liliaceae Juss.

Genus: *Drimia* Jacq.

Species: *D. polyantha* (Blatt. & McCann) Stearn

### APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Monocots
- Order: Asparagales Link
- Family: Asparagaceae Juss.
- Subfamily: Scilloideae Burnett
- Genus: *Drimia* Jacq.
- Species: *D. polyantha* (Blatt. & McCann) Stearn

## 4. Distribution:

**Global:** India

**India:** Eastern and Western Ghats, Gujarat, Karnataka, Maharashtra, Tamil Nadu.

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

## 6. Threat Status:

**IUCN:**

**BSI:**

7. **Habit and Habitat:** Scapigerous bulbous herb and growing on plateaus or rocky hill slopes or roadsides.

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

9. **Economic Importance:** Bulbs have medicinal and pharmacological properties

10. **Probable Progenitor of:**

11. **DNA**

**C- value**

2C (20.41 pg)<sup>2</sup>

**Methodology**

Flow Cytometry<sup>2</sup>

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

**13. Zygotic chromosome number(s):**  $2n=20$  <sup>2, 15, 21, 29, 34</sup>

**14. Gametic chromosome number(s):**  $n=10$  <sup>15</sup>

**15. Specialized chromosomes (B chromosomes/ Sex chromosomes/ Polytene chromosomes/ Neocentric chromosomes):** B chromosomes (7) <sup>21</sup>

Image file

**16. Ploidy level:** Diploid <sup>2, 15, 21, 29, 34</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 submetacentric to subtelocentric chromosomes <sup>34</sup>; Majority subtelocentric chromosomes <sup>2, 15, 21</sup>

**Chromosome size** Small to large <sup>2, 15, 34</sup>

**NOR chromosome(s)** 2 NOR <sup>2, 34</sup>

**Degree of asymmetry:** Stebbin's 2b class <sup>15</sup>; Stebbin's 1b class <sup>2, 21</sup>

Image file

**22. Banding pattern(s):** Fluorescent banding by CMA/ DAPI staining <sup>2</sup>

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>10</sup>

Image file

**27. Chromosome distribution at anaphase I:** Normal <sup>15</sup>

**28. Genetic diversity:**

**Chromosomal level** <sup>2</sup>

Image file

**DNA level** <sup>29, 43</sup>

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

stainability: (92- 98%)<sup>15</sup>