Species Datasheet

Datasheet No. A-074.001.001
(family.genus.species)

DBT- Network Programme

-

1. Taxon:

Species *Drimia coromandeliana* (Roxb.) Lekhak & P. B. Yadav
Subspecies
Variety
Cultivar
Hybrid

Image file

2. Synonyms: *Indurgia coromandeliana* (Roxb.) Speta, *Scilla coromandeliana* Roxburgh, *Thuranthos coromandelianus* (Roxb.) Speta, *Urginea coromandeliana* Hook.f.

3. Systematic Position:

Bentham and Hooker (1862)
Kingdom: Plantae
Division: Phanerogamia
Class: Monocotyledones
Series: Coronarieae
Ordo: Liliaceae Juss.
Genus: *Drimia* Jacq.
Species: *D. coromandeliana* (Roxb.) Lekhak & P. B. Yadav

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Monocots
- Order: Asparagales Link
- Family: Asparagaceae Juss.
- Subfamily: Scilloideae Burnett
- Genus: *Drimia* Jacq.
- Species: *D. coromandeliana* (Roxb.) Lekhak & P. B. Yadav

4. Distribution:

Global: Asia

India: South Eastern coast, Karnataka, Maharashtra

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

6. Threat Status:

IUCN:

BSI:

7. Habit and Habitat: Scapigerous bulbous herb

8. Life Form: Bulbous geophytes

9. Economic Importance: *Drimia coromandeliana* is a natural tetraploid which had the highest bufadienolides content.

10. Probable Progenitor of:

11. DNA

C- value	Methodology
2C (40.80 pg) [1]	Flow Cytometry [1, 2]
2C (40.81 pg) [2]	

12. Basic chromosome number(s):

13. Zygotic chromosome number(s): 2n= 40 [1, 2, 14, 21, 29, 39, 40]

14. Gametic chromosome number(s): n= 20 [14]

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

Image file

16. Ploidy level: Tetraploid [1, 2, 14, 21, 29]

Image file

17. Agametoploidy

18. Nature of polyploidy (auto, segmental, allo, autoallo): Autotetraploid [14]; segmental polyploidy [14]

19. Genomic formula:

20. Aberrant chromosome number(s) (aneuploidy, aneusomaty, polysomaty):

21. Somatic chromosomes:

Karyotype Majority subtelocentric chromosomes [2, 21, 29]

Chromosome size Small to very large [2, 14]

NOR chromosome(s) 4 NOR [2]

Degree of asymmetry: Highly asymmetrical [14]; Stebbin's 1b class [2, 21]

Image file

22. Banding pattern(s): Fluorescent banding by CMA/ DAPI staining [2]

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 (16- 20 II) [14]

Image file

27. Chromosome distribution at anaphase I: Normal [14]; bridges with laggard [14]

28. Genetic diversity:

Chromosomal level [2]

Image file

DNA level [29, 43]

29. Any other information (Apomixis; Inversion; Male sterility; Pollen grain mitosis; Pollen stainability; Translocations etc): Pollen stainability: 93 % [14]