

Species Datasheet

Datasheet No. A-073.003.008
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species *Crinum lorifolium* Roxb. ex Ker Gawl.

Subspecies

Variety

Cultivar

Hybrid

Image file

2. **Synonyms:** *Crinum canalifolium* Herb., *C. elegans* Carey ex Herb., *C. longifolium* Roxb. ex Ker Gawl., *C. pratense* Herb.

3. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Monocots
- Order: Asparagales Link
- Family: Amaryllidaceae J. St.-Hil.
- Genus: *Crinum* L.
- Species: *C. lorifolium* Roxb. ex Ker Gawl.

Bentham and Hooker (1862)

Kingdom: Plantae
Division: Phanerogamia
Class: Monocotyledones
Series: Epigynae
Ordo: Amaryllidaceae Dumort.
Genus: *Crinum* L.
Species: *C. lorifolium* Roxb. ex Ker Gawl.

4. Distribution:

Global: *Crinum lorifolium* is native to Myanmar (Pegu) and distributed in tropical and warm regions worldwide, mostly in Africa.

India: Throughout India

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

6. Threat Status:

IUCN: Least Concern

BSI:

7. **Habit and Habitat:** Herb. It grows occasionally in stream, riverbank and pen place

8. **Life Form:** Bulbous geophytes

9. **Economic Importance:** It is cultivated in Upper Gangetic plains in India as a garden flower. From this species, the following chemical compounds were isolated (lycorine, 1,2-diacetylycorine, ambelline, narcissidine and three phenanthridone alkaloids, viz. hippadine, pratorinine and anhydrolycorin-7-one)

10. **Probable Progenitor of:**

11. DNA

C- value

Methodology

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

13. **Zygotic chromosome number(s):** $2n=22^{6,19,21}$

14. **Gametic chromosome number(s):**

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

Image file

16. **Ploidy level:**

Image file

17. **Agameteoploidy**

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

19. **Genomic formula:**

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

21. Somatic chromosomes:

Karyotype: Majority metacentric and submetacentric chromosomes ¹⁹

Chromosome size: Medium to large ²¹

NOR chromosome(s):

Degree of asymmetry:

Image file

22. Banding pattern(s): CMA bands ¹⁹, DAPI bands ¹⁹

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

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):