

Species Datasheet

Datasheet No. A-073.003.007
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species *Crinum latifolium* L.

Subspecies

Variety

Cultivar

Hybrid

Image file

2. Synonyms: *Amaryllis insignis* Ker Gawl., *A. littoralis* Salisb., *A. moluccana* Ker Gawl., *Crinum cochinchinense* M. Roem., *C. esquirolii* H. Lév., *C. insigne* (Ker Gawl.) Sweet, *C. jemenicum* Dammann, *C. ornatum* var. *latifolium* (L.) Herb. *C. speciosum* Herb., *C. yemense* Dammann

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. latifolium* L.

Bentham and Hooker (1862)

Kingdom: Plantae
Division: Phanerogamia
Class: Monocotyledones
Series: Epigynae
Ordo: Amaryllideae Dumort.
Genus: *Crinum* L.
Species: *C. latifolium* L.

4. Distribution:

Global: Indian subcontinent, through Malaysia and Indonesia

India: Throughout India

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

6. Threat Status:

IUCN:

BSI:

7. Habit and Habitat: Herb; sandy coasts, rocky slopes

8. Life Form: Bulbous geophytes

9. Economic Importance: Extract of *Crinum latifolium* is used for its antitumor activity.

10. Probable Progenitor of:

11. DNA

C- value

Methodology

12. Basic chromosome number(s): $x = 11^{3,7,8,10,12}$

13. Zygotic chromosome number(s): $2n = 22^{2,6,8,10,12,24}$

$2n = 33^{3,7}$

14. Gametic chromosome number(s): $n = 11^2$

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

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16. Ploidy level: Diploid^{2,10}

Triploid^{3,7}

Image file

17. Agameteoploidy

18. Nature of polyploidy (auto, segmental, allo, autoallo): Allotriploid or segmental triploid³

19. Genomic formula:

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

21. Somatic chromosomes:

Karyotype: Majority submetacentric chromosomes ²

Majority metacentric chromosomes ⁸

Chromosome size

NOR chromosome(s): 2 NOR ^{2, 8}

Degree of asymmetry: Symmetrical ¹⁰

Image file

22. Banding pattern(s): CMA bands ³, DAPI bands ³, Q bands ¹³

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: 8+7 II ^{2, 10}, 6 +8 II ^{2, 10}, 4+9 II ^{2, 10}, 11 II ^{2, 10}

Image file

27. Chromosome distribution at anaphase I: Normal distribution of chromosomes and 1-3 bridge fragment configurations ^{2, 10}

28. Genetic diversity:

Chromosomal level

Image file

DNA level: ¹⁴

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