

Species Datasheet

Datasheet No. A-028.010.006
(family.genus.species)

DBT- Network Programme

-

1. Taxon:

Species *Cryptocoryne spiralis* (Retz.) Fisch. ex Wydler

Subspecies

Variety

Cultivar

Hybrid

Image file

2. **Synonyms:** *Ambrosina spiralis* (Retz.) Roxb., *Arum spirale* Retz., *Cryptocoryne huegelii* Schott, *C. spiralis* var. *spiralis*, *C. tortuosa* Blatt. & McCann

3. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperm
- Clade: Monocots
- Order: Alismatales R. Br. ex Bercht. & J. Presl
- Family: Araceae Juss.
- Genus: *Cryptocoryne* Fisch. ex Wydler
- Species: *C. spiralis* (Retz.) Fisch. ex Wydler

Bentham and Hooker (1862)

Kingdom: Plantae
Division: Phanerogamia
Class: Monocotyledones
Series: Nudiflorae
Ordo: Aroideae Arn.
Genus: *Cryptocoryne* Fisch. ex Wydler
Species: *C. spiralis* (Retz.) Fisch. ex Wydler

4. Distribution:

Global: Bangladesh, India

India: Peninsular & East India

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

6. Threat Status:

IUCN:

BSI:

7. **Habit and Habitat:** Herb, tropical Dry Forest

8. **Life Form:** Tuberous geophytes

9. **Economic Importance:-**

10. **Probable Progenitor of:**

11. **DNA**

C- value

Methodology

12. **Basic chromosome number(s):** x=14¹⁷

13. Zygotic chromosome number(s): $2n=33$ ⁹

$2n=66$ ^{6,9}

$2n=70$ ¹³

$2n=88$ ^{6,9}

$2n=90$ ^{4,5,7,8,10}

$2n=112$ ¹⁷

$2n=132$ ⁹

14. Gametic chromosome number(s): $n=45$ ^{4,5}

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

Image file

16. Ploidy level: Tetraploid⁹, Octaploid¹⁷

Image file

17. Agametoploidy

18. Nature of polyploidy (auto, segmental, allo, autoallo): Allopolyploid⁴

19. Genomic formula:

20. Aberrant chromosome number(s) (aneuploidy, aneusomaty, polysomaty): Variant chromosome number in somatic cells showing $2n=86$ ⁴

21. Somatic chromosomes:

Karyotype: Majority nearly metacentric chromosomes⁴

Chromosome size: Very small to small^{4,17}

NOR chromosome(s): 4 NOR⁴

Degree of asymmetry:

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 45 II⁴

Image file

27. Chromosome distribution at anaphase I: Lagging⁴

28. Genetic diversity:

Chromosomal level

Image file

DNA level

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