

Species Datasheet

Datasheet No. A-028.005.037
(family.genus.species)

DBT- Network Programme

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1. Taxon:

Species *Arisaema tortuosum* (Wall.) Schott

Subspecies

Variety

Cultivar

Hybrid

Image file

2. Synonyms: *Arisaema commutatum* Schott, *A. curvatum* (Roxb.) Kunth, *A. curvatum* Hook., *A. filiforme* Thwaites, *A. helleborifolium* Schott, *A. steudelii* Schott, *A. tortuosum* var. *curvatum* (Roxb.) Engl., *A. tortuosum* var. *helleborifolium* (Schott) Engl., *A. tortuosum* var. *steudelii* (Schott) Engl., *A. tortuosum* subsp. *tortuosum*, *A. wightii* Hook.f., *Arum curvatum* Roxb., *A. tortuosum* Wall.

3. Systematic Position:

APG IV (2016)

- Kingdom: plantae
- Clade: Angiosperm
- Clade: Monocots
- Order: Alismatales R. Br. ex Bercht. & J. Presl
- Family: Araceae Juss.
- Genus: *Arisaema* Mart.
- Species: *A. tortuosum* (Wall.) Schott

Bentham and Hooker (1862)

Kingdom: Plantae
Division: Angiosperm
Class: Monocotyledones
Series: Nudiflorae
Ordo: Aroideae Arn.
Genus: *Arisaema* Mart.
Species: *A. tortuosum* (Wall.) Schott

4. Distribution:

Global: China South-Central, China, India, Myanmar, Nepal, Pakistan, Sri Lanka, Tibet

India: North East India, Western Himalaya

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

6. Threat Status:

IUCN: Not yet accessed

BSI:

7. Habit and Habitat: Perennial tuberous herbs grows in open *Rhododendron* forests and alpine meadows

8. Life Form: Tuberous Geophyte

9. Economic Importance: Folk medicines

10. Probable Progenitor of:

11. DNA

C- value

Methodology

12. Basic chromosome number(s): $x=14$ ²¹

13. Zygotic chromosome number(s): $2n=24$ ²⁵
 $2n=26$ ^{20,24,42}
 $2n=28$ ^{1,20,21,27, 34,51}
 $2n=56$ ^{47,52}

14. Gametic chromosome number(s): $n=14$ ^{43,44}
 $n=26$ ⁵³

15. Specialized chromosomes (B chromosomes/Sex chromosomes/Polytene chromosomes/Neocentric chromosomes): B chromosome (0-7)²⁰
Image file

16. Ploidy level:

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 metacentric chromosomes⁵¹, Majority metacentric to submetacentric chromosomes²⁵, Majority submetacentric to subtelocentric chromosomes²¹

Chromosome size: Small^{47,51}, Small to medium²⁵

NOR chromosome(s): 4NOR²⁵

Degree of asymmetry: Symmetrical²¹

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

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):