

Species Datasheet

Datasheet No. A-377.001.003
(family.genus.species)

DBT- Network

1. Taxon:

Species: *Acanthus ilicifolius* L.

Subspecies

Variety

Cultivar

Hybrid

Image file

2. **Synonyms:** *Acanthus doloarin* Blanco, *A. ilicifolius* subsp. *orientalis* Bremeck., *A. ilicifolius* var. *subinteger* Nees, *A. neoguineensis* Engl., *Dilivaria ilicifolia* (L.) Juss.

3. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Eudicots
- Clade: Asterids
- Order: Lamiales
- Family: Acanthaceae Juss.
- Genus: *Acanthus* L.
- Species: *A. ilicifolius* L.

Bentham and Hooker (1862)

- Kingdom: Plantae
- Division: Phanerogamia
- Class: Dicotyledons
- Subclass: Gamopetalae
- Series: Bicarpellatae
- Cohors: Personales
- Ordo: Acanthaceae Juss.
- Genus: *Acanthus* L.
- Species: *A. ilicifolius* L.

4. Distribution:

Global: Widespread from South India and Sri Lanka to Indochina, Indonesia, the Philippines and northern Australia, but scarce in Malaysia. Common in the mangroves of south China (i.e. Pearl River Delta, China).

India: Andaman and Nicobar Islands, Coastal Orissa, east and west coast, Goa, Karnataka, Kerala, Maharashtra, Tamil Nadu, West Bengal

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

6. Threat Status:

IUCN: Least Concern

BSI:

7. Habit and Habitat: Shrub, it commonly grows on the river banks or tidal canal sides or low swampy areas in the mangrove forests

8. Life Form: Chamaephytes

9. Economic Importance: This plant can be used as medicine for neuralgia and rheumatism. Several authors have described the chemical properties of this species and its use in China. The root (boiled in mustard oil) is used in paralysis of limbs; water extracted from the bark is used to treat colds and skin allergies.

10. Probable Progenitor of:

11. DNA

C-value: Average 4c DNA (pg) = 11.496²

Methodology: Fuelgen cytophotometric method²

12. Basic chromosome number(s):

13. Zygotic chromosome number(s): 2n = 44^{2, 6, 7}

14. Gametic chromosome number(s): n = 22^{2, 6, 7, 8}

15. Specialized chromosomes (B chromosomes/Sex chromosomes/Ring chromosomes/etc):

Image file

16. Ploidy level: Diploid^{2, 6, 7, 8}

Image file

17. Agametoploidy:

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/sub-metacentric^{2, 6, 7}

Chromosome size–1.56-2.56 μm ⁶

NOR chromosome(s)

Degree of asymmetry: Symmetrical^{2, 6}

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: 22II^{2, 6, 7}

27. Chromosome distribution at anaphase I:

28. Genetic diversity:

Chromosomal level:

DNA level: Yes^{1, 5}

29. Any other information: