

Genus Datasheet

1. Genus:*Acanthus* L.

Bentham and Hooker (1862)

- Kingdom: Plantae
- Division: Phanerogamia
- Class: Dicotyledons
- Subclass: Gamopetalae
- Series: Bicarpellatae
- Cohors: Personales
- Ordo: AcanthaceaeJuss.
- Genus: *Acanthus* L.

2. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Eudicots
- Clade: Asterids
- Order: LamialesBromhead
- Family: Acanthaceae Juss.
- Genus: *Acanthus* L.

3. Species:

Global: 29

India: 6

4. Taxonomic riddles: Yes ¹

5. Distribution:

Global:South Asia, including Brunei Darussalam, China, South Taiwan, India, Malaysia, Philippines, Singapore, Thailand, Vietnam, Cambodia, and Indonesia. In Australasia it is found in northeast Australia, northwest Australia, Papua New Guinea, and the Solomon Islands.

India:Andaman Islands,East and west coast, Eastern Himalaya and West Bengal,Western Ghats

6. Habit and Habitat:Herb or Shrub,Grows in tropical, subtropical and warm temperate regions.

7.Economic Importance:*Acanthus* species are a potential medicinal plants used mainly by traditional medicinal practitioners.*A.ilicifolius*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.

8. DNA content range

4C (8.396-11.495pg) ² Feulgen cytophotodensitometry²

Methodology:

9. Basic chromosome number(s):x= Not Reported

10. Zygotic chromosome number (s):2n=44 ³,2n=56⁴

11. Gametic chromosome number (s): n =22³,n=28⁴

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

13. Ploidy level:Diploid^{3, 4}

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

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

16. Cytogenetic mechanism (s) underlying evolution:

17. Banding pattern(s):Not reported

18. Physical mapping of chromosomes ;GISH :not reported

19. Meiosis;Karyograms :~ Normal; Majority metacentric / submetacentric chromosomes^{3, 6}

20.Phylogenetic relationship at Chromosomal; DNAlevel:Chromosomal level^{2, 3, 4, 6, 7}

DNA level^{1, 5}

21. Linkage map:No

22. Any other information: