

Genus Datasheet JamU+CalU+SUK-Phase I

Datasheet No. A-239.001
(Family.Genus)

DBT- Network Programme

1. Genus: *Anacardium* L.

2. Systematic position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Eudicots
- Clade: Superrosids
- Clade: Rosids
- Order: Sapindales Juss. Ex Bercht. & J. Presl
- Family: Anacardiaceae R. Br.
- Genus: *Anacardium* L.

Bentham and Hooker (1862)

- Kingdom: Plantae
- Division: Phanerogamia
- Class: Dicotyledons
- Subclass: Polypetalae
- Series: Disciflorae
- Cohors: Sapindales Juss. Ex Bercht. & J. Presl
- Ordo: Anacardiaceae R. Br.
- Genus: *Anacardium* L.

3. Species:

Global: 20

India: 1

4. Taxonomic riddles:

5. Distribution:

Global: Africa, Bangladesh, India, Myanmar, Philippines, Sri Lanka and Tropical America

India: Hotter parts of India, especially near coastal areas

6. Habit and Habitat: Evergreen small trees; found near coastal areas

7. Economic Importance: In *A. occidentale* edible seeds are referred to as cashew nuts. They are surrounded by leathery shell (mesocarp), which is rich in liquid. This substance is an important raw material for resin. The liquid contains skin-irritant toxic compounds, which are removed by heating. The fleshy hypocarp, or cashew apple, processed into jam and dried fruit.

8. DNA content range:

$2C(0.743-0.899 \text{ pg})^1$

Methodology

Flow cytometry¹

9. Basic chromosome number(s): $x=7^3$; $x=12^7$

10. Zygotic chromosome number(s): $2n=40^2$; $2n=42^3$

11. Gametic chromosome number(s): $n=12^{4,5}$; $n=15^6$; $n=21^3$

12. Specialized chromosomes (B chromosomes/Sex chromosomes/Polytene Chromosomes/ Neocentric chromosomes):

13. Ploidy level: Diploid³; polyploid⁷

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

15. Aberrant chromosome number(s) (aneuploidy, aneusomaty, polysomaty): aneuploid chrom with $n=20^7$

16. Karyograms:

Meiosis:³

17. Banding pattern(s):

18. Physical mapping of chromosomes:GISH:

19. Phylogenetic relationship at Chromosomal; DNA level:

20. Cytogenetic mechanism (s) underlying evolution: Intraspecific aneuploidy played important evolution of taxa⁷

21. Linkage map:

22. Any other information: