

Datasheet No. A-239.001.001
(family.genus.species)

DBT- Network Programme

1.Taxon:

Species: *Anacardium occidentale* L.

Subspecies

Variety

Cultivar

Hybrid

Image file

2. **Synonyms:** *Acqjuba occidentalis* (L.) Gaertn., *Anacardium microcarpum* Ducke, *A. occidentale* var. *americanum* Jacq., *A. occidentale* var. *gardneri* Engl., *Cassuvium pomiferum* Lam., *C. reniforme* Blanco, *C. solitarium* Stokes

3.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.
- Species: *A. occidentale* L.

Bentham and Hooker (1862)

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

4.Distribution:

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

India: Hotter parts of India, especially near coastal areas

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

6.Threat Status:

IUCN:

BSI:

7. **Habit and Habitat:** Evergreen small trees. Found near coastal areas

8. **Life Form:** Phanerophytes

9. **Economic Importance:** Edible seeds are referred to as cashew nuts. They are surrounded by a 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, cashew apple, is processed into jam and dried fruit.

10. **Probable Progenitor of:**

11. **DNA**

C-value

Methodology

2C (0.743-0.899 pg)¹

Flow cytometry¹

12. Basic chromosome number(s):

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

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

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

Image file

16. Ploidy level: Diploid³; polyploid⁷

Image file

17. Agametoploidy:

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

19. Genomic formula:

20. Aberrant chromosome number(s) (aneuploidy, aneusomy, polysomy): aneuploid chromosome number with $n=20^7$

21. Somatic chromosomes:

Karyotype Majority submetacentric chromosomes³

Chromosome size (1.0-4.2) μm^3

NOR chromosome(s)

Degree of asymmetry Symmetrical³

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 2III³

Image file

27. Chromosome distribution at anaphase I: Regular³

28. Genetic diversity:

Chromosomal level

Image file

DNA level^{8,9,10,11,12,13,14,15,16,17,18,19,20,21,22}

29. Any other information (Apomixis; Inversion; Male sterility; Pollen grain mitosis;

Pollen stainability;Translocationsetc):