Genus Datasheet

Datasheet No. G-005.001 (Family.Genus)

DBT- Network Programme

1. Genus: *Gnetum* L.

2. Systematic Position:

Christenhusz*et al.* (2011)

- Class: Equisetopsida C. Agardh
- Subclass: CycadidaePax
- Order: Cycadales Pers.
- Family: GnetaceaeBlume
- Genus: *Gnetum*L.

Bentham and Hooker (1862)

Kingdom: Plantae
Division:Phanerogamia
Class: Gymnospermeae
Ordo: GnetaceaeBlume
Genus: *Gnetum*L.

3. Species:

Global: 41

India: 6

4. Taxonomic riddles:[10,11]

5. Distribution:

Global: Distributedintropical and humid regions of the world. Nearly all species, except *G. microcarpum*, occur below an altitude of 1500 metres.

India: It is found in Western Ghats near Khandala, forests of Kerala, Nilgiris, Godawari district of Andhra Pradesh and Orissa.

6. Habit and Habitat: Majority of the *Gnetum* species are tropical evergreen climbers except a few shrubs and trees. *G. trinerve* is apparently parasitic.

7.Economic Importance: The Seeds of *G. gnemon*are eaten after roasting or cocking. The orange red pulp is removed and the seed mashed into cakes,dried and fried in oil to make a cake or biscuit. The bark yields a strong fibre durable in sea water and therefore valued for fishing lines and nets. The fruits of *G. ula* are edible,the seeds also produce an oil that can be used for medicinal purposes or for burning.

8. DNA content range:

C-value2C (4.54-7.74pg)[4, 7]

Methodology

Methodology: Feulgen microdensitometry[4,7]

9. Basic chromosome number(s):x=22[2, 3, 4, 5, 6, 8]

10. Zygotic chromosome number(s):2n=44[2, 3, 4, 7], 48[8]

1. Gametic chromosome number(s):n=22[5,6]

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

13. Ploidy level: Diploid[2, 3, 4, 5, 6, 7]

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

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

16. Karyograms: [2, 8, 9]

Meiosis:[5,6]

17. Banding pattern(s):

18. Physical mapping of chromosomes: Southern blot rDNA[1]

GISH:

20. Cytogenetic mechanism (s) underlying evolution:

21. Linkage map:

22. Any other information: