Genus Datasheet

Datasheet No. A-076.005 **DBT- Network**
Programme
(Family.Genus)

1. Genus: *Borassus* L.

2. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperm
- Clade: Monocot
- Clade: Commelinids
- Order: Arecales Bromhead
- Family: Arecaceae Bercht. & J. Presl
- Subfamily: Coryphoideae Burnett
- Genus: *Borassus* L.

Bentham and Hooker (1862)
Kingdom: Plantae
Division: Spermatophyta
Class: Monocotyledon
Series: Calycinae
Ordo: Palmae Juss.
Genus: *Borassus* L.

3. Species:

Global: 6

India: 1

4. Taxonomic riddles:

5. Distribution:

Global: Africa**,** Australia, Bangladesh, Burma, Cambodia, China, India, Indonesia, Laos, Madagascar Malaysia, Mexico, Nepal, New Guinea, Pakistan, Papuasia, Philippines, Socotra, Sri Lanka, Thailand, Vietnam,

India: Andhra Pradesh, Bihar, Goa, Karnataka, Kerala, Maharashtra**,** Orissa, Tamil Nadu, West Bengal

6. Habit and Habitat: Tall palms; grow in some mountains, also found on banks of rivers. Species grow on low sandy plains near sea level where exposed to sun and winds.

7. Economic Importance: Leaves have been used for writing; wood is valuable for building; inflorescences are tapped and the syrup, sugar, or alcohol may be a staple.

8. DNA content range: **Methodology:**

4C (34.39 pg) [1] Feulgen microdensitometry[1]

9. Basic chromosome number(s): x= 18[14]

10. Zygotic chromosome number (s): 2n= 36[2, 3, 4, 5, 6, 7, 8, 9, 10]

11. Gametic chromosome number (s): n=18[6]

12. Specialized chromosomes (B chromosomes/Sex chromosomes/Polytene chromosomes/ N chromosomes): Presences of one pair heteromorphic sex chromosomes in somatic cells of male pair of heteromorphic bivalent during meiosis[7]

13. Ploidy level: Ploypoid[7]

14. Nature of polyploidy (auto, segmental, allo, autoallo): Allopolyploid[7]

15. Aberrant chromosome number(s) (aneuploidy, aneusomaty, polysomaty): Somatic cells chromosomes number 2n= 8[6], 2n=16[6], 2n=20[6], 2n= 21[6], 2n= 34[6]; Endosperm showing 72, 108, chromosomes in addition to 3n= 54[10]

16. Karyograms:[6] **Meiosis:**

17. Banding pattern(s):

18. Physical mapping of chromosomes: **GISH:**

19. Phylogenetic relationship at Chromosomal; DNA level:

21. Linkage map:

22. Any other information: