Datasheet No. A-085.002.007 (family.genus.species) **DBT-** Network Programme

1. Taxon:

Species:*Musa balbisiana* Colla Subspecies Variety Cultivar Hybrid

Image file

2. Synonyms:

3. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Commelinids
- Order: Zingiberales Griseb.
- Family: Musaceae Juss.
- Genus: Musa L.
- Species: M. balbisiana Colla

Bentham and Hooker (1862)

- Kingdom: Plantae
- Division: Phanerogamia
- Class: Monocotyledones
- Series: Epigynae
- Ordo: Scitamineae
- Genus:*Musa* L.
- Species: M. balbisiana Colla

4. Distribution:

Global: Bismarck Archipelago, China, Hainan, India, Japan, Jawa, Myanmar, Nansei-shoto, New Guinea, Philippines, Sri Lanka Thailand, Tibet, Vietnam, Borneo, Gulf of Guinea Island, Hawaii, Malaya, Taiwan

India: Manipur, Meghalaya, Mizoram, Nagaland, Sikkim; also cultivated throughout India

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

6. Threat Status:

IUCN: Least concern

BSI

7. Habit and Habitat: Large cormous herb; Forests, on forest edges, in ravines and on water sides

8. Life Form: Cormous geophyte

9. Economic Importance: The pulp of ripe fruit is eaten, considered highly medicinal to feed infant and patients. Young shoots (pseudo stem) are eaten as vegetable known as "pochola". Flowering part known as "koldil" is also used as vegetable. Its dried leaf, and outer cover of fruit are dried, burnt and prepare an alkaline substance known as "Kalakhar". Leaves and leaf sheaths are used as good fodder for cow. The whole plant and parts are used in different religious as well as domestic celebrations.

10. Probable Progenitor of:

11. DNA

C-value

2C (1.108-1.121 pg)¹¹

2C (1.14±0.03 pg)12

2C (1.16-1.76 pg)¹³

Methodology

Flow cytometry^{11,12,13}

12. Basic chromosome number(s): x=11¹³

13. Zygotic chromosome number(s):2n=22^{1,3,4,6,11,14,15}

14. Gametic chromosome number(s):n=11^{14,16}

15. Specialized chromosomes (B chromosomes/Sex chromosomes/Polytene

chromosomes/Neocentric chromosomes):

Image file

16. Ploidy level: Diploid^{11,13,15}; triploid¹³

Image file

- 17. Agametoploidy:
- 18. Nature of polyploidy (auto, segmental, allo, autoallo):
- **19. Genomic formula:** BB^{11,12,13}; BBB¹³
- 20. Aberrant chromosome number(s) (aneuploidy, aneusomaty, polysomaty):
- 21. Somatic chromosomes:

Karyotype: Majority metacentric chromosomes¹⁵

Chromosome size

NOR chromosome(s)

Degree of asymmetry

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

Image file

- 27.Chromosome distribution at anaphase I:
- 28. Genetic diversity:

Chromosomal level Image file DNA level^{17,18,19,20}

29. Any other information (Apomixis; Inversion; Male sterility; Pollen grain mitosis; Pollen stainability; Translocationsetc):