

# Species Datasheet CalU+SUK-Phase I

Datasheet No. A-087.001.002  
(family.genus.species)

DBT- Network Programme

## 1. Taxon:

Species: *Maranta cristata* Neesmart.

Subspecies

Variety

Cultivar

Hybrid

Image file

2. **Synonyms:** *Calathea bicolor* Steud., *C. kerchoveana* hort. ex Gentil, *Goeppertia bicolor* Nees, *Maranta bicolor* Ker Gawl., *Thalia bicolor* K.Koch, *T. colorata* Vell.

## 3. Systematic Position:

### APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Monocots
- Order: Zingiberales Griseb.
- Family: Marantaceae R.Br.
- Genus: *Maranta* L.
- Species: *M. cristata* Neesmart.

### Bentham and Hooker (1862)

Kingdom: Plantae  
Division: Phanerogamia  
Class: Monocotyledones  
Series: Epigynae  
Ordo: Scitamineae  
Genus: *Maranta* L.  
Species: *M. cristata* Neesmart.

## 4. Distribution:

**Global:** India, tropical America

**India:** Peninsular India, Central India, Arunachal Pradesh, Assam, Meghalaya

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

## 6. Threat Status:

**IUCN:**

**BSI:**

7. **Habit and Habitat:** Herb; moist well drained soil

## 8. Life Form:

9. **Economic Importance:** Used as ornamental plant mostly for the leaves and purify the air

## 10. Probable Progenitor of:

## 11. DNA

C- value

Methodology

4C (0.1734 AU)<sup>1</sup>

Feulgen microspectrophotometry<sup>1</sup>

## 12. Basic chromosome number(s):

13. **Zygotic chromosome number(s):**  $2n=24^5$ ;  $2n=52^{1,4}$

14. **Gametic chromosome number(s):**  $n=12^5$

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

Image file

## 16. Ploidy level:

Image file

## 17. Agametoploidy

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

## 19. Genomic formula:

**20. Aberrant chromosome number(s) (aneuploidy, aneusomy, polysomy):**

**21. Somatic chromosomes:**

**Karyotype:** Majority metacentric chromosomes<sup>4</sup>

**Chromosome size:** Very small<sup>4</sup>

**NOR chromosome(s):** 8NOR<sup>4</sup>

**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**

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