Species Datasheet CalU+SUK-Phase I

Datasheet No. A-087.001.001
(family.genus.species)

DBT- Network Programme

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1. Taxon:

Species: *Maranta arundinacea* L.
Subspecies
Variety
Cultivar
Hybrid

Image file

2. Synonyms: *Maranta arundinacea* f. *sylvestris* Matuda; *M. arundinacea* var. *arundinacea*; *M. arundinacea* var. *indica* Petersen; *M. arundinacea* var. *variegata* Ridl.; *M. indica* Tussac; *M. ramosissima* Wall.; *M. sylvatica* Roscoe; *M. sylvatica* Roscoe ex Sm.; *Phrynium variegatum* N.E.Br.

3. Systematic Position:

APG IV (2016)

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

Bentham and Hooker (1862)
Kingdom: Plantae
Division: Phanerogamia
Class: Monocotyledones
Series: Epigynae
Ordo: Scitamineae
Genus: *Maranta* L.
Species: *M. arundinacea* L.

4. Distribution:

Global: Mexico, Central America, West Indies, South America, Jamaica, Bahamas, Bermuda, the Netherlands Antilles, India, China, Taiwan, Volcano Islands, Mauritius, Réunion, Equatorial Guinea, Gabon, Florida, Cambodia, Indonesia and the Philippines

India: Sri Lanka

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

6. Threat Status:

IUCN

BSI

7. Habit and Habitat: Perennial herb; grows in rain forests, Moist floors of evergreen or deciduous forests

8. Life Form:

9. Economic Importance: High quality starch from rhizome is used in food preparations and confectionery, for industrial applications such as cosmetics and glue. The residue of starch extraction has a high fiber content and can be fed to livestock.

10. Probable Progenitor of:

11. DNA

C- value	Methodology
4C (0.1262 AU)[1]	Feulgen microspectrophotometry[1]

12. Basic chromosome number(s):

13. Zygotic chromosome number(s): 2n=18[2]; 2n=48[1,3,4]

14. Gametic chromosome number(s):

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, aneusomaty, polysomaty):

21. Somatic chromosomes:

Karyotype: Majority metacentric chromosome[4]

Chromosome size: Very small to small[4]

NOR chromosome(s): 6 NOR[4]

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):