

Species Datasheet

Datasheet No. G-02.002.001
(Family.genus.species)

DBT- Network Programme

1.Taxon:

Species: *Dioon mejiae* Standl. & L. O. Williams

Subspecies:

Variety:

Cultivar:

Hybrid:

Image file

2. Synonyms: *Dioon edule* var. *latipinnium* Dyer

3.Systematic Position:

Christenhusz et al. (2011)

- Class: Equisetopsida C. Agardh
- Subclass: Cycadidae Pax
- Order: Cycadales Pers.
- Family: Zamiaceae Horan.
- Genus: *Dioon* Lindl.
- Species: *Dioon mejiae* Standl. & L. O. Williams

Bentham and Hooker (1862)

Kingdom: Plantae

Division: Phanerogamia

Class: Gymnospermeae

Ordo: Cycadaceae Pers.

Tribus: Encephalarteae

Genus: *Dioon* Lindl.

Species: *Dioon mejiae* Standl. & L. O. Williams

4.Distribution:

Global: Honduras

India: Planted at Botanical Garden, NBRI, Lucknow and Uttar Pradesh.

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

6.Threat Status:

IUCN: Least Concern

BSI:

7.Habit and Habitat: Medium-to-large cycad, this species is typically an understorey component of semideciduous tropical rain forest and is found on steep slopes and in canyons, but also grows on flat terrain.

8.Life Form: Phanerophytes

9.Economic Importance:Seeds edible

10. Probable Progenitor of:

11.DNA

C-value2C (50.30 pg)⁶ **Methodology** Flow cytometry ⁶

12.Basic chromosome number(s): $x=9$ 1, 2, 3

13. Zygotic chromosome number(s): $2n=18$ 2, 3

14. Gametic chromosome number(s): $n=$

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

Image file

16.Ploidy level:Diploid^{2, 3}

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:2, 3

KaryotypeMostly Median, submedian and a pair of telocentric chromosomes^{2, 3}

Chromosome size Large ^{2, 3}

NOR chromosome(s)

Degree of asymmetry Moderately asymmetrical ^{2, 3}

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; Translocation etc.):