Final Species Datasheet

Datasheet No. G-001.001.004
(family.genus.species)

1.Taxon:

Species: *Cycasrevoluta*Thunb.
Subspecies:
Variety:
Cultivar:
Hybrid:

Image file

2. Synonyms:*Cycas inermis* Oudem., *C. miquelii* Warb., *C. revoluta* var. *revoluta*, *Epicycas miquelii* (Warb.) de Laub.

3. Systematic Position:
Christenhusz*et al.* (2011)

- Class: Equisetopsida C. Agardh
- Subclass: CycadidaePax
- Order: Cycadales Pers.
- Family:Cycadaceae Pers.
- Genus: *Cycas*L.
- Species:*C.revoluta*Thunb.

Bentham and Hooker (1862)
Kingdom: Plantae
Division: Phanerogamia
Class: Gymnospermeae
Ordo: Cycadaceae Pers.
Tribus: CycadeaeColla
Genus: *Cycas*L.
Species: *C.revoluta*Thunb.

4.Distribution:

Global: Native to southern Japan

India: Cultivated in Indian garden. Very common

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

6.ThreatStatus:

IUCN: Least concern

BSI:

7.Habit and Habitat: Shrub, plants occur primarily on steep to precipitous stony sites, but previously they occurred on flatter land which has since been cleared.

8.LifeForm: Phanerophytes

9.EconomicImportance: Ornamental, Pith contains edible starch used for making sagoo

10. Probable Progenitor of:

11.DNA

C-valueMethodology:

2C (25.54pg)[11]Feulgenmicrodensitometry[11]

2C (20.60 pg) [28] other method[28]

2C (27.40 pg) [29]Flow cytometry[29]

12.Basic chromosome number(s):x=11[3, 4, 5, 6, 7, 8, 9, 10, 11, 14, 17, 18, 20, 21]

13. Zygotic chromosome number(s):2n=22[3, 4, 5, 7, 8, 9, 10, 11, 14, 17, 18, 20, 21]

20[15]

14. Gametic chromosome number(s):n=11[5, 19]

15.Specialized chromosomes (B chromosomes/Sex chromosomes/Polytene chromosomes/Neocentric chromosomes):[5,14]

Image file

16.Ploidy level: Diploid[3, 4, 5, 7, 8, 9, 10, 11, 14, 17, 18, 19, 20, 21]

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:3, 4, 5, 7, 8, 9, 10, 11, 13, 16, 17, 18, 20, 21

Karyotype Median, submedian, suterminal and terminal[3, 4, 5, 7, 8, 9, 10, 11, 13, 16, 17, 18, 20, 21]

Chromosome size Large[3, 4, 5, 7, 8, 9, 10, 11, 13, 16, 17, 18, 20, 21]

NOR chromosome(s)16[4], 24 (signals)[21]

Degree of asymmetry Fairly asymmetrical[3, 4, 5, 7, 8, 9, 10, 11, 13, 16, 17, 18, 20, 21]

Image file

22. Banding pattern(s):C bands [18] , CMA+, DAPI+ [4, 9]

Image file

23.Physical mapping of chromosomes:

In situ hybridization 5S rRNA 35S rRNASouthern hybridization, PCR, sequencing [2]

Image file

Fluorescent in situhybridization35SrRNA [4, 21] , 5S rRNA[3, 7] , Telomeric sequences[5]

Image file

24.Genomicinsituhybridization:

Image file

25. Linkage map:

Image file

26.Chromosome associations:

Female meiosis

Male meiosis$11II^{5}$

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;Translocationsetc):