

Species Datasheet

Datasheet No. G-002.007.001
(family.genus.species)

1.Taxon:

Species: Zamia angustifolia Jacq.

Subspecies:

Variety:

Cultivar:

Hybrid:

Image file

2. Synonyms: *Palmifolium angustifolium* (Jacq.) Kuntze, *P. angustissimum* (Miq.) Kuntze, *P. multifoliatum* (A. DC.) Kuntze, *P. strictum* (Miq.) Kuntze, *P. yatesii* (Miq.) Kuntze, *Zamia angustifolia* var. *angustissima* (Miq.) Regel, *Z. angustifolia* var. *stricta* (Miq.) Regel, *Z. angustifolia* var. *yatesii* (Miq.) Regel, *Z. angustissima* Miq., *Z. brachyphylla* J.Schust., *Z. guggenheimiana* Carabia, *Z. linearifolia* Linden, *Z. linearis* Miq. ex J.Schust., *Z. linifolia* Regel, *Z. multifoliolata* A.DC., *Z. stricta* Miq., *Z. verbruggiana* J.Schust., *Z. yatesii* Miq.

3.Systematic Position:

Christenhusz et al. (2011)

- Class: Equisetopsida C. Agardh
- Subclass: Cycadidae Pax
- Order: Cycadales Pers.
- Family: Zamiaceae Horan.
- Genus: *Zamia* L.
- Species: *Z. angustifolia* Jacq.

Bentham and Hooker (1862)

Kingdom: Plantae
Division: Phanerogamia
Class: Gymnospermeae
Ordo: Cycadaceae Pers.
Tribus: Encephalarteae
Genus: *Zamia* L.
Species: *Z. angustifolia* Jacq.

4.Distribution:

Global: Bahamas and eastern part of Cuba

India: Planted at Botanical Survey of India, Allahabad, Gujarat

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

6.Threat Status:

IUCN: Vulnerable

BSI:

7.Habit and Habitat:Small cycad,*Z. angustifolia* grows on dry limestone soils. They occur only on the red soils and not on the white soils. It grows in open habitats such as grassland and also in pine forests.

8.Life Form:Phanerophytes

9.Economic Importance:Ornamental

10. Probable Progenitor of:

11.DNA

C-value 2C (pg): 24.12¹⁰

Methodology Feulgen densitometry¹⁰

12.Basic chromosome number(s): $x=8^{4, 9, 14, 15}$

13. Zygotic chromosome number(s): $2n=16^{9, 14, 15}$

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

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

Image file

16.Ploidy level:Diploid^{9, 14, 15}

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: 9, 14, 15

Karyotype Mostly median 2 submedian and 2 subterminal pairs^{9, 14, 15}

Chromosome size Large^{9, 14, 15}

NOR chromosome(s) 6¹⁵

Degree of asymmetry Moderately asymmetrical^{9, 14, 15}

Image file

22. Banding pattern(s): DAPI⁺, CMA⁺ bands¹⁴

Image file

23. Physical mapping of chromosomes: 45S rDNA, 5S rDNA¹⁵

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.):