

Species Datasheet

Datasheet No. G-002.007.004
(family.genus.species)

1.Taxon:

Species:*Zamia pumila* L.

Subspecies:

Variety:

Cultivar:

Hybrid:

Image file

2. Synonyms: *Encephalartospumilus* (L.) Sweet, *Palmifoliumdebile* (Aiton) Kuntze, *P.integrifolium* (L.f. ex Aiton) Kuntze, *P.pumilum* (L.) Kuntze, *Zamiaallison-armourii* Millsp., *Z.concinna* Regel, *Z.cylindrica* Regel, *Z.debilis* L.f. ex Aiton, *Z.dentata* Voigt, *Z.humilis* Salisb., *Z.integrifolia* L.f. ex Aiton, *Z.laeta* Salisb., *Z.latifoliolata* Preneloup, *Z.media* var. *portoricensis* (Urb.) J.Schust., *Z.portoricensis* Urb.

3.Systematic Position:

Christenhusz et al. (2011)

- Class: Equisetopsida C. Agardh
- Subclass: Cycadidae Pax
- Order: Cycadales Pers. ex Bercht. & J.Presl
- Family: Zamiaceae Horan.
- Genus: *Zamia* L.
- Species: *Z. pumila* L.

Bentham and Hooker (1862)

- Kingdom: Plantae
Division: Phanerogamia
Class: Gymnospermeae
Ordo: Cycadaceae Pers.
Tribus: Encephalartae
Genus: *Zamia* L.
Species: *Z. pumila* L.

4.Distribution:

Global: Central Cuba, Southern Puerto Rico, and Hispaniola

India: Planted at Botanical Garden, NBRI, Lucknow and University of Allahabad, Uttar Pradesh

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

6.Threat Status:

IUCN: Near Threatened

BSI:

7.Habit and Habitat: Shrubs and grow in very well drained soils. This includes limestone soils and even sandy beach strand soils

8.Life Form:Phanerophytes

9.Economic Importance:Horticulture

10. Probable Progenitor of:

11.DNA

C-value

Methodology

2C (38.20 pg)¹⁶

Flow cytometry¹⁶

12.Basic chromosome number(s): $x=8^1, 4, 7, 9, 14, 15$

13. Zygotic chromosome number(s): $2n=16^1, 7, 9, 14, 15$

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

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

Image file

16.Ploidy level:Diploid^{1, 7, 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: 1, 7, 9, 14, 15

Karyotype Mostly median and submedian^{1, 7, 9, 14, 15}

Chromosome size Large^{1, 7, 9, 14, 15}

NOR chromosome(s) 6¹⁵

Degree of asymmetry Symmetrical^{1, 7, 9, 14, 15}

Image file

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

Image file

23. Physical mapping of chromosomes:

In situ hybridization

Image file

Fluorescent in situ hybridization: 45S rDNA, 5S rDNA¹⁵

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;Translocationetc.):