

Genus Datasheet

Datasheet No. G-002.007
(Family.Genus)

DBT- Network Programme

1.Genus:*Zamia* L.

2. Systematic Position:

Christenhusz et al. (2011)

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

Bentham and Hooker (1862)

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

3. Species:

Global: 65

India: 7

4. Taxonomic riddles: 17, 18, 19, 20, 21

5. Distribution:

Global: Native to South, Central & North America.

India: Cultivated in Gardens

6. Habit and Habitat: Deciduous shrubs; grow in very well drained soils. This includes limestone soils and even sandy beach strand soils

7. Economic Importance: Ornamentals and some species are used in Brazil as an antidote to snakebite

8. DNA content range:

2C (36.30-38.20 pg)¹⁶

2C (24.12 pg)¹⁰

Methodology

Flow cytometry¹⁶

Feulgen densitometry¹⁰

9. Basic chromosome number(s): $x=8$ ^{1, 3, 4, 6, 9, 11, 12, 13, 14, 15}, 9 ^{2, 4, 5, 7, 8, 14, 15}

10. Zygotic chromosome number(s): $2n=16$ ^{1, 3, 4, 6, 9, 11, 12, 13, 14, 15}, 18 ^{2, 5, 7, 8, 14, 15}

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

12. Specialized chromosomes (B chromosomes/Sex chromosomes/Polytene Chromosomes/Neocentric chromosomes):

13. Ploidy level: Diploid^{1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15}

14. Nature of polyploidy (auto, segmental, allo, autoallo):

15. Aberrant chromosome number(s) (aneuploidy, aneusomaty, polysomaty):

16. Karyograms: 1, 2, 5, 6, 7, 8, 9, 11, 14, 15

Meiosis:

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

18. Physical mapping of chromosomes:45S rDNA, 5S rDNA¹⁵, telomere sequences^{2, 5}

GISH:

19. Phylogenetic relationship at Chromosomal; DNA level: 17, 18, 19, 20, 21

20. Cytogenetic mechanism (s) underlying evolution:

21. Linkage map: