

Genus Datasheet

Datasheet No. G-011.004

(Family.Genus)

DBT- Network Programme

1. Genus: *Cryptomeria* D. Don

2. Systematic Position:

Christenhusz et al. (2011)

- Class: Equisetopsida C. Agardh
- Subclass: Pinidae Cronquist
- Order: Cupressales Link
- Family: Cupressaceae Gray
- Genus: *Cryptomeria* D. Don

Bentham and Hooker (1862)

Kingdom: Plantae
Division: Phanerogamia
Class: Gymnospermeae
Ordo: Coniferae
Tribus: Taxodieae Eichler
Genus: *Cryptomeria* D. Don

3. Species:

Global: 1

India: 1

4. Taxonomic riddles:

5. Distribution:

Global: Native to Japan

India: Arunachal Pradesh, Sikkim, West Bengal

6. Habit and Habitat: very large evergreentree, reaching up to 70 m (230 ft) tall and 4 m (13 ft) trunk diameter, occurs naturally in pure and mixed stands from Kyushu to N Honshu at elevations to 400 m

7. Economic Importance: It is used in house construction, panelling, flooring, carpentry, joinery, and furniture making. The fibrous bark was traditionally used for roofs of houses but is now more often processed as a general fibre or composted.

8. DNA content range:

Methodology

2C (20.60-22.10 pg)^{5, 24} Flow cytometry^{5, 24}

9. Basic chromosome number(s): $x=11$ ^{1, 4, 8, 7, 9, 10, 11, 12 13, 14, 15, 16, 17, 25}

10. Zygotic chromosome number(s): $2n=22$ ^{1,2, 3, 4, 8, 9, 10, 11, 12 13, 14, 15, 16, 17}

1. Gametic chromosome number(s): $n=11$ ^{2, 3, 15, 17, 25}

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

13. Ploidy level:Diploid^{1,2, 3, 4, 8, 9, 10, 11, 12 13, 14, 15, 16, 17, 25}

Triploid (sporadic)⁹

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

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

16. Karyograms: ^{1,2, 3, 4, 8, 9, 10, 11, 12 13, 14, 15, 16, 17}

Meiosis:^{2,3, 25}

17. Banding pattern(s):CMA⁺, DAPI⁺bands^{3,8, 9}

18. Physical mapping of chromosomes:18S rRNA², 45S rDNA⁴

20. Cytogenetic mechanism (s) underlying evolution:

21. Linkage map:^{22, 23}

22. Any other information: