Genus Datasheet

Datasheet No. G-011.006 (Family.Genus)

DBT- Network Programme

1. Genus:*Cupressus*L.

2. Systematic Position:

Christenhusz*et al.* (2011)

- Class: Equisetopsida C. Agardh
- Subclass: Pinidae Cronquist
- Order: Cupressales Link
- Family:Cupressaceae Gray
- Genus: *Cupressus* L.

Bentham and Hooker (1862)

Kingdom: Plantae
Division:Phanerogamia
Class: Gymnospermeae
Ordo: Coniferae
Tribus: Cupressineae
Genus: *Cupressus* L.

3. Species:

Global: 19

India: 8

4. Taxonomic riddles:12, 13, 14, 15, 16, 17

5. Distribution:

Global: Native to scattered localities in mainly warm temperate regions in the Northern Hemisphere, including western North America, Central America, northwest Africa, the Middle East, Himalaya, southern China and northern Vietnam

India: Himalaya

6. Habit and Habitat: Evergreen trees or large shrubs, growing to 5–40 m tall, forming pure, dense stands or scattered in mixed montane conifer forest or pine forest, also in pine-oak forest and woodland.

7.Economic Importance: As of all Cupressaceae in Asia, the wood of this species is valued for many uses, primarily to do with its durability (rot resistance). Traditionally it has been used for the construction of Buddhist temples and religious wood carving.

8. DNA content range: **Methodology**

2C (22.70-28.36 pg) [9]Feulgenmicrodensitometry[9]

2C (21.50-22.80 pg) [4,11]Feulgenmicrodensitometry[4,11]

9. Basic chromosome number(s):x=11[1, 2, 3,5, 6, 7,8, 9]

10. Zygotic chromosome number(s):2n=22[1, 2, 3, 6, 7, 8, 9, 10]

11. Gametic chromosome number(s):n=11 [7, 8]

22[7]

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

13. Ploidy level: Diploid [1, 2, 3, 5, 6, 7, 8, 9, 10]

Tetraploid (sporadic)[7]

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

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

16. Karyograms: [2, 3, 6,7, 8]

Meiosis: [7, 8]

17. Banding pattern(s):CMA+, DAPI+ bands[2, 3]

19.Phylogenetic relationship atChromosomal; DNAlevel:[12, 13, 14, 15, 16, 17]

20. Cytogenetic mechanism (s) underlying evolution:

21. Linkage map:

22. Any other information: