

Species Datasheet

Datasheet No. G-011.006.008
(family.genus.species)

1.Taxon:

Species: *Cupressus sempervirens* L.

Subspecies:

Variety:

Cultivar:

Hybrid:

Image file

2. Synonyms: *Chamaecyparis thujiformis* R.Sm. ex Gordon, *Cupressus conoidea* Spadoni, *C. elongata* Salisb., *C. expansa* Targ.Tozz.exSteud., *C. fastigiata* DC., *C. foemina* Garsault, *C. globulifera* Parl., *C. horizontalis* Mill., *C. horizontalis* (Mill.) Voss, *C. horizontalis* var. *pendula* Endl., *C. lugubris* Salisb., *C. mariae* Sennen, *C. mas* Garsault, *C. orientalis* Beissn., *C. patula* Pers., *C. pyramidalis* O.Targ.Tozz., *C. roylei* Carriere, *C. sempervirens* var. *globulifera* Parl., *C. sempervirens* var. *horizontalis* (Mill.) Loudon, *C. sempervirens* subsp. *horizontalis* (Mill.) A.Camus, *C. sempervirens* f. *horizontalis* (Mill.) Voss, *C. sempervirens* f. *numidica* Trab., *C. sempervirens* var. *pendula* (Endl.) A.Camus, *C. sempervirens* var. *pyramidalis* (O.Targ.Tozz.) Nyman, *C. sempervirens* var. *sphaerocarps* (Parl.) Parl., *C. sempervirens* var. *stricta* Aiton, *C. sempervirens* f. *stricta* (Aiton) Rehder, *C. sempervirens* var. *umbilicata* (Parl.) Parl., *C. sphaerocarpa* Parl., *C. stricta* Mill. ex Gordon, *C. thujifolia* Knight ex Gordon, *C. thujiformis* Parker ex Gordon, *C. thujoides* H.Low ex Gordon, *C. tournefortii* Audib. exCarriere, *C. umbilicata* Parl., *Juniperus whitleyana* Miq.

3. Systematic Position:

Christenhusz et al. (2011)

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

Bentham and Hooker (1862)

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

4.Distribution:

Global: Native of West Asia, eastern Mediterranean region

India:

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

6. Threat Status:

IUCN: Least concern

BSI:

7. Habit and Habitat: Evergreen tree up to 35 m tall, dry Mediterranean type climate, grows in pine or juniper woodland associated with *Pinus brutia*, *Juniperus excelsa*, *J. foetidissima*, *J. drupacea*, *J. phoenicea*, *Quercus* spp., *Pistacia atlantica*, *Amygdalus scoparia*, and *Poterium spinosum*; in rocky soil mostly over limestone on slopes and in gorges, occasionally igneous rock. In its natural habitat occurs from 90 m to 1700 m a.s.l.

8. Life Form: Phanerophytes

9. Economic Importance: First, its wood was valued for its resistance to decay, later it also became an ornamental.

10. Probable Progenitor of:

11. DNA

C-value	Methodology
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2C (22.74 pg) ⁹	Feulgen microdensitometry ⁹
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2C (22.80 pg) ¹¹	Flow cytometry ¹¹
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12. Basic chromosome number(s): $x=11$ ^{1, 2, 5, 7}

13. Zygotic chromosome number(s): $2n=22$ ^{1, 2, 8, 10}

14. Gametic chromosome number(s): $n=11$ ⁸

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

Image file

16. Ploidy level: Diploid^{1, 2, 5, 7, 8, 10}

Image file,

17. Agametoploidy:

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

19. Genomic formula:

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

21. Somatic chromosomes:^{2, 8}

Karyotype Median and submedian^{2, 8}

Chromosome size Large^{2, 8}

NOR chromosome(s) 6^{2, 8}

Degree of asymmetry Symmetrical^{2, 8}

Image file

22. Banding pattern(s): CMA+, DAPI+ bands²

Image file

23. Physical mapping of chromosomes:

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 11II^7

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.):