

Species Datasheet

Datasheet No. G-011.012.002
(family.genus.species)

1.Taxon:

Species:*Thujaplicata*Donn ex D.Don

Subspecies:

Variety:

Cultivar:

Hybrid:

Image file

2. Synonyms:*Libocedrus craigiana* H.Low ex Gordon, *L. gigantea* H.Low ex Gordon, *Thuja asplenifolia* Carriere, [*T. californica* K.Koch](#), *T. douglasii* Nutt. ex Parl., *T. flabellata* Beissn., *T. gigantea* Nutt., *T. gigantea* var. *atrovirens* Gordon, *T. gigantea* var. *pendula* Beissn., *T. lobbiana* Gordon, *T. lobbii* Gordon, *T. lycopodioides* Beissn., *T. menziesii* Douglas ex Endl., *T. menziesii* var. *fastigiata* Carriere, *T. occidentalis* var. *plicata* (Donn ex D.Don) Loudon ex Hoopes, *T. plicata* f. *atrovirens* (Gordon) O.L.Lipa, *T. plicata* f. *fastigiata* (Carriere) C.K.Schneid., *T. plicata* f. *pendula* (Beissn.) Rehder, *T. plicatilis* Beissn., *T. wareana* Lodd. ex Loudon

3.Systematic Position:

Tracheophyte Phylogeny (2012)

- Kingdom: Spermatophytes
- Clade: Gymnosperms
- Order: Cycadales Pers. ex Bercht. & J. Presl
- Family: Zamiaceae Horan.
- Genus: *Thuja* L.
- Species: *T.plicata*Donn ex D. Don

Bentham and Hooker (1880)

Kingdom: Plantae
Division: Phanerogamia
Class: Gymnospermeae
Ordo: Cycadaceae Pers.
Tribus: Cupressineae

4.Distribution:

Global:Native to North America.

India: Planted in Rajasthan (Udaipur)

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

6.Threat Status:

IUCN:Least concern

BSI:

7.Habit and Habitat:Evergreen tree (upto 71high), thrive well in areas with humid air and high rainfall

8.LifeForm:Phanerophytes

9.Economic Importance:Timber specially used for ladder poles and rugby goal posts

10. Probable Progenitor of:

11.DNA

C-value	Methodology
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2C (24.59 pg) ⁵	Feulgenmicrodensitometry ⁵
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2C (25. 68 pg) ⁹	Flow cytometry ⁹
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2C (22. 60pg) ⁸	Flow cytometry ⁸
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12.Basic chromosome number(s): $x=11^{1, 2, 6, 7}$

13. Zygotic chromosome number(s): $2n=22^{2, 7}$

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

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

Image file

16.Ploidy level:Diploid^{2, 7}

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

KaryotypeMedian and submedian²

Chromosome sizeLarge²

NOR chromosome(s)2²

Degree of asymmetrySymmetrical²

Image file

22. Banding pattern(s):

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

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.):