

Species Datasheet

Datasheet No. G-011.003.001
(family.genus.species)

1.Taxon:

Species: *Chamaecyparis lawsoniana* (A.Murraybis) Parl.

Subspecies:

Variety:

Cultivar:

Hybrid:

Image file

2. Synonyms: *Chamaecyparis allumii* (Webster) Heydt, *C. boursieri* f. *viridis* Hartwig&Rümppler, *C. lawsoniana* f. *alba-spica* (Gordon) Beissn., *C. lawsoniana* f. *aluminii* Beissn., *C. lawsoniana* f. *argentea* (Lawson ex Gordon) Beissn., *C. lawsoniana* var. *argentea* (Lawson ex Gordon) Beissn., *C. lawsoniana* var. *billwoodiana* Dallim. & A.B.Jacks., *C. lawsoniana* f. *erecta* (H.Jaeger) C.K.Schneid., *C. lawsoniana* f. *filiformis* (Fillot) Beissn., *C. lawsoniana* f. *fletcheri* (Hornibr.) Rehder, *C. lawsoniana* f. *fraseri* Beissn., *C. lawsoniana* var. *glaucula* (H.Jaeger) W.Hochst., *C. lawsoniana* f. *glaucula* (H.Jaeger) Beissn., *C. lawsoniana* f. *glaucescens* Rehder, *C. lawsoniana* f. *gracilis* (J.Nelson) Beissn., *C. lawsoniana* f. *intertexta* (R.Sm.) Beissn., *C. lawsoniana* f. *lutea* (R.Sm.) C.K.Schneid., *C. lawsoniana* var. *minima-glaucula* (R.Sm.) Beissn., *C. lawsoniana* f. *nana* (Dauvesse) Beissn., *C. lawsoniana* var. *nana-glaucula* Beissn., *C. lawsoniana* f. *pendula* (Beissn.) Beissn., *C. lawsoniana* var. *pendula* Beissn., *C. lawsoniana* f. *pendula-alba* (Paul ex Gordon) Beissn., *C. lawsoniana* f. *pendula-vera* (Hesse) Voss, *C. lawsoniana* var. *pendula-vera* (Hesse) A.H.Kent, *C. lawsoniana* var. *stewartii* Schelle, *Cupressus fragrans* Kellogg, *C. lawsoniana* A.Murraybis, *C. lawsoniana* var. *alba-spica* Gordon, *C. lawsoniana* var. *alba-spica-nana* Gordon, *C. lawsoniana* var. *aluminii* Webster, *C. lawsoniana* f. *alumnii* (Webster) Beissn., *C. lawsoniana* var. *argentea* Lawson ex Gordon, *C. lawsoniana* f. *argentea* (Lawson ex Gordon) Geerinck, *C. lawsoniana* var. *erecta* H.Jaeger, *C. lawsoniana* var. *filiformis* (Fillot) A.H.Kent, *C. lawsoniana* var. *glaucula* H.Jaeger, *C. lawsoniana* var. *gracilis* J.Nelson, *C. lawsoniana* var. *intertexta* R.Sm., *C. lawsoniana* f. *lutea* (R.Sm.) Geerinck, *C. lawsoniana* var. *minima-glaucula* R.Sm., *C. lawsoniana* var. *nana-glaucula* (Beissn.) A.H.Kent, *C. lawsoniana* var. *pendula* (Beissn.) A.Camus, *C. lawsoniana* var. *pendula-alba* Paul ex Gordon, *C. lawsoniana* var. *pendula-vera* (Hesse) A.H.Kent, *C. lawsoniana* f. *stewartii* (Schelle) Geerinck, *C. lawsoniana* f. *viridis* (Hartwig&Rümppler) Geerinck, *C. nutkanus* Torr., *Retinispora lawsoniana* (A.Murraybis) A.V.Bobrov&Melikyan

3.Systematic Position:

Christenhusz et al. (2011)

- Class: Equisetopsida C. Agardh
- Subclass: Gnetidae Pax
- Order: Cupressales Link
- Family: Cupressaceae Gray
- Genus: *Chamaecyparis* Spach
- Species: *C. lawsoniana* (A.Murraybis) Parl.

Bentham and Hooker (1862)

Kingdom: Plantae
Division: Phanerogamia
Class: Gymnospermeae
Ordo: Coniferae
Tribus: Cupressineae

4.Distribution:

Global:Native to Oregon & California (USA), occurs at 1500 m in Klameth mountain valleys

India: Tamil Nadu (Kodaikanal)

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

6.Threat Status:

IUCN:Near Threatened

BSI:

7.Habit and Habitat:Evergreen tree 60 m tall, prefers sandy and clay loams and rocky ridges. This species occurs in the greatest abundance within about 64 km of the Pacific coast.

8.Life Form:Phanerophytes

9.EconomicImportance:A very ornamental tree frequently planted in gardens.Timber, the white, aromatic wood is highly valued by the Japanese for shrines, temples and arrow shafts, originally used for uses as diverse as shipbuilding and match sticks, it is now the most valuable wood harvested in western North America

10. Probable Progenitor of:

11.DNA

C-value	Methodology
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2C (30.10 pg)	⁷ Feulgen microdensitometry ⁷
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2C (21.60 pg)	⁹ Flow cytometry ⁹
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2C (23.20 pg) ²	Flow cytometry ²
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12.Basic chromosome number(s):x=11^{3, 4, 7, 8, 10}

13. Zygotic chromosome number(s):2n=22^{3, 4, 7, 8, 10}

14. Gametic chromosome number(s):n=

15.Specialized chromosomes (B chromosomes/Sex chromosomes/Polytene

chromosomes/Neocentric chromosomes):

Image file

16.Ploidy level:Diploid^{4, 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:^{4, 10}

KaryotypeMedian and submedian^{4, 10}

Chromosome sizeLarge^{4, 10}

NOR chromosome(s)^{4, 10}

Degree of asymmetrySymmetrical^{4, 10}

Image file

22. Banding pattern(s):CMA⁺ bands¹⁰

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;Translocationsetc.):**