

Species Datasheet

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Datasheet No. G-011.006.004
(family.genus.species)

1.Taxon:

Species: *Cupressus goveniana* Gordon

Subspecies:

Variety:

Cultivar:

Hybrid:

Image file

2. Synonyms: *Callitropsis goveniana* (Gordon) D.P.Little, *Cupressus aromatica* Gordon, *C. attenuata* Gordon, *C. bourgeauii* Gordon, *C. californica* Carrière, *C. cornuta* Carrière, *C. goveniana* var. *attenuata* (Gordon) Carrière, *C. goveniana* var. *cornuta* (Carrière) Carrière, *C. goveniana* subsp. *gibsonensis* Silba, *C. goveniana* var. *glauca* Carrière, *C. goveniana* var. *goveniana*, *C. goveniana* var. *gracilis* Carrière, *C. goveniana* var. *huberiana* Carrière, *C. goveniana* var. *parva* Lemmon, *C. goveniana* var. *pendula* A.Henry, *C. goveniana* var. *pigmaea* Lemmon, *C. goveniana* subsp. *pigmaea* (Lemmon) Bartel, *C. goveniana* var. *viridis* Carrière, *C. pigmaea* (Lemmon) Sarg., *C. silbae* B.Huangbis, *Hesperocyparis goveniana* (Gordon) Bartel, *H. pigmaea* (Lemmon) Bartel, *Juniperus aromatica* Carrière, *Neocupressus goveniana* (Gordon) deLaub.

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. goveniana* Gordon

Bentham and Hooker (1862)

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

4.Distribution:

Global: Native to hills of the coast from Mendocino country to San Diego country in California

India: Tamil Nadu (Kodaikanal)

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

6. Threat Status:

IUCN: Endangered

BSI:

7.Habit and Habitat: Evergreen shrub or small tree (10-50 m tall), grows on sterile soils at sea level to 1200 m a.s.l. This species is found in chaparral, 'pine barrens', and open pine woodland, on sandstone outcrops, white or yellow sandy slopes, and leached, virtually sterile sandy 'hardpan', where it becomes dwarfed. The altitudinal range is from near sea level to 1200 m a.s.l. The climate is of the Mediterranean type with dry, hot summers, but in a narrow coastal strip cooled by frequent fog, and winter rain.

8.Life Form: Phanerophytes

9.Economic Importance: In southern Europe it is grown more widely in gardens and parks

10. Probable Progenitor of:

11.DNA

C-value	Methodology
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12.Basic chromosome number(s): $x=11^{5, 7}$

13. Zygotic chromosome number(s): $2n=22^6$

14. Gametic chromosome number(s): $n=11^7$

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

Image file

16.Ploidy level: Diploid^{6, 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:Haploid endosperm mitosis⁷

Karyotype Median submedian⁷

Chromosome size Large⁷

NOR chromosome(s)2 (endosperm mitosis)⁷

Degree of asymmetry Symmetrical⁷

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 meiosis11II⁷

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.):