

Species Datasheet

Datasheet No. G-007.002.001
(family.genus.species)

1.Taxon:

Species: *Cedrusdeodara* (Roxb. ex D. Don) G. Don

Subspecies:

Variety:

Cultivar:

Hybrid:

Image file

2. Synonyms: *Abies deodara* (Roxb. ex D.Don) Lindl., *Cedrus deodara* var. *argentea* J.Nelson, *C.deodara* f. *argentea* (J.Nelson) Beissn., *C. deodara* f. *aurea* (J.Nelson) Rehder, *C. deodara* var. *aurea* J.Nelson, *C. deodara* var. *compacta* Carriere, *C. deodara* var. *fastigiata* Carriere, *C. deodara* var. *flava* Carriere, *C. deodara* f. *pendula* Beissn., *C. deodara* f. *robusta* (C.Lawson) Beissn., *C. deodara* var. *tristis* Carriere, *C. deodara* var. *variegata* Carriere, *C. indica* Chambray, *C. libani* var. *deodara* (Roxb. ex D.Don) Hook.f., *C. libani* subsp. *deodora* (Roxb. ex D.Don) P.D.Sell, *Larix deodara* (Roxb. ex D.Don) K.Koch, *Pinus deodara* Roxb. exD.Don, *P. deodara* Roxb., *P. deodara* var. *robusta* C.Lawson

3.Systematic Position:

Christenhuszet al. (2011)

- Class: Equisetopsida C. Agardh
- Subclass: PinidaeCronquist
- Order: PinalesGorzh.
- Family: PinaceaeSpreng.
- Genus:*Cedrus*Trew
- Species: *C.deodara* (Roxb. ex D. Don)
G. Don

Bentham and Hooker (1862)

Kingdom: Plantae
Division:Phanerogamia
Class: Gymnospermeae
Ordo: Coniferae
Tribus:AbietineaeEichler
Genus: *Cedrus*Trew
Species: *C. deodara* (Roxb. ex D. Don)
G. Don

4.Distribution:

Global: Native to western Himalaya (India), Eastern Afghanistan, Northern Pakistan

India: Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Planted at West Bengal, Meghalaya, Arunachal Pradesh

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

6. Threat Status:

IUCN: Least concern

BSI:

7. Habit and Habitat: Large evergreen tree (30-50 m tall), 1300-3200 m a.s.l, *Cedrus deodara* is a high mountain tree, but it occurs in a wide range of habitats in the Himalaya. It grows in a belt at elevations between 17,00 m and 3,000 m a.s.l. in the western part of its range and between 1,300 m and 3,300 m in the eastern part, where the climate is less dry.

8. Life Form: Phanerophytes

9. Economic Importance: This is one of the sacred trees of India, wood is highly valuable, Cedar wood and cedar oil are known to be a natural repellent to moths, also used as an ornamentals

10. Probable Progenitor of:

11. DNA

C-value	Methodology
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2C (32.60 pg) ¹	Flow cytometry ¹
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2C (33.20 pg) ⁹	Flow cytometry ⁹
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12. Basic chromosome number(s): $x=12$ ^{1, 3, 4, 6, 7}

13. Zygotic chromosome number(s): $2n=24$ ^{1, 3,}

14. Gametic chromosome number(s): $n=12$ (endosperm mitosis)^{6, 7}

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

Image file

16. Ploid level: Diploid^{1, 3, 5, 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:^{1, 3}

KaryotypeMedian and submedian^{1, 3}

Chromosome sizeLarge^{1, 3}

NOR chromosome(s)6^{1, 3}

Degree of asymmetrySymmetrical^{1, 3}

Image file

22. Banding pattern(s):CMA+, Ho+ bands¹

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 level²

29. Any other information (Apomixis; Inversion; Male sterility; Pollen grain mitosis; Pollen stainability; Translocation etc.):