

Species Datasheet

Datasheet No. G-008.002.001
(family.genus.species)

1.Taxon:

Species: *Araucaria angustifolia* (Bertol.) Kuntze

Subspecies:

Variety:

Cultivar

Hybrid

Image file

2. Synonyms: *Araucaria angustifolia* var. *alba* Reitz, *A. angustifolia* var. *caiova* Reitz, *A. angustifolia* var. *caiuva* Mattos, *A. angustifolia* f. *catharinensis* Mattos, *A. angustifolia* var. *dependens* Mattos, *A. angustifolia* var. *indehiscens* Mattos, *A. angustifolia* var. *monoica* Reitz, *A. angustifolia* var. *nigra* Reitz, *A. angustifolia* var. *sancti-josephi* Reitz, *A. angustifolia* var. *semialba* Reitz, *A. angustifolia* var. *stricta* Reitz, *A. angustifolia* var. *vinacea* Mattos, *A. brasiliana* A.Rich., *A. brasiliana* var. *gracilis* Carriere, *A. brasiliana* var. *ridolfiana* (Pi.Savi) Gordon, *A. brasiliana* var. *saviana* (Parl.) Parl., *A. brasiliensis* Loudon, *A. brasiliensis* A. Rich., *A. brasiliensis* var. *saviana* (Parl.) Parl., *A. dioica* (Vell.) Stellfeld, *A. elegans* Carriere, *A. ridolfiana* Pi.Savi, *A. saviana* Parl., *Columbea angustifolia* Bertol., *C. brasiliana* (A.Rich.) Carriere, *C. brasiliana* var. *elegans* Carriere, *C. brasiliana* var. *ridolfiana* (Pi.Savi) Carriere, *C. brasiliensis* var. *ridolfina* (Pi.Savi) Carriere, *Pinus dioica* Vell.

3.Systematic Position:

Christenhusz et al. (2011)

- Class: Equisetopsida C. Agardh
- Subclass: Pinidae Cronquist
- Order: Araucariales Gorozh.,
- Family: Araucariaceae Henkel & W.Hochst.
- Genus: *Araucaria* Juss.
- Species: *A. angustifolia* (Bertol.) Kuntze

Bentham and Hooker (1862)

Kingdom: Plantae
Division: Phanerogamia
Class: Gymnospermeae
Ordo: Coniferae
Tribus: Araucarieae D. Don
Genus: *Araucaria* Juss.
Species: *A. angustifolia* (Bertol.) Kuntze

4.Distribution:

Global: Native of southern Brazil

India:

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

6.Threat Status:

IUCN: Critically endangered

BSI:

7.Habit and Habitat: Evergreen tree, with a straight trunk and horizontal branches, the crown becoming flat-topped with age, found in subtropical forests.

8.LifeForm:Phanerophytes

9.Economic Importance: Previously heavily exploited for its timber which was widely used for construction. The species is used as a fuelwood. Seeds are used as a food source and resin from the bark is traded subnationally. The tree is also planted as an ornamental.

10. Probable Progenitor of:

11.DNA

C-value2C (44.70pg)⁸

MethodologyFlow cytometry⁸

12.Basic chromosome number(s): $x=13$ ^{1, 2,3,4,5, 6}

13. Zygotic chromosome number(s): $2n=26$ ^{1, 2,3, 6}

14. Gametic chromosome number(s): $n=13$ (endosperm mitosis)⁵

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

Image file

16.Ploidy level:Diploid^{1,2 ,3,5, 6}

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, 5, 6}

KaryotypeMostly median and submedian^{1, 3, 5, 6}

Chromosome sizeMedium^{1, 3, 5, 6}

NOR chromosome(s)2⁶

Degree of asymmetrySymmetrical^{1, 3, 5, 6}

Image file

22. Banding pattern(s):C- bands, Ag staining, CMA+, DAPI+⁶

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.):