

Species Datasheet

Datasheet No. G-011.003.002 DBT- Network Programme
(Family.genus.species)

1.Taxon:

Species: *Chamaecyparis obtusa* (Siebold&Zucc.) Endl.

Subspecies:

Variety:

Cultivar:

Hybrid:

Image file

2. Synonyms: *Chamaecyparis acuta* Beissn., *C. andelyensis* Gordon, *C. breviramea* Maxim., *C. keteleri* Standish ex Parl., *C. lycopodioides* (Gordon) Senec. *C. obtusa* f. *alba-spica* (R.Sm.) Beissn., *C. obtusa* f. *aurea* (Fortune ex Gordon) Rehder, *C. obtusa* f. *barronii* Rehder, *C. obtusa* var. *breviramea* (Maxim.) Mast., *C. obtusa* f. *breviramea* (Maxim.) Rehder, *C. obtusa* f. *compacta* (Gordon) Beissn., *C. obtusa* var. *crippsii* Rehder, *C. obtusa* f. *crippsii* (Rehder) Rehder, *C. obtusa* var. *erecta* Beissn., *C. obtusa* f. *erecta* (Beissn.) Rehder, *C. obtusa* var. *ericoides* Boehm. ex Beissn., *C. obtusa* var. *fastigiato-ovata* Uyeki, *C. obtusa* f. *filicoides* (Hartw. & Rümpler) Beissn., *C. obtusa* var. *filicoides* Hartw. & Rümpler, *C. obtusa* f. *gracilis* (Rehder) Rehder, *C. obtusa* var. *gracilis* Rehder, *C. obtusa* f. *gracilis-aurea* (R.Sm.) C.K.Schneid., *C. obtusa* var. *langissimopendula* Makino, *C. obtusa* f. *lycopodioides* (Gordon) Beissn., *C. obtusa* f. *magnifica* (R.Sm.) Rehder, *C. obtusa* f. *nana* (Carrière) Beissn., *C. obtusa* var. *nana* Carrière, *C. obtusa* var. *obtusata*, *C. obtusa* f. *pendula* (Maxim.) Beissn., *C. obtusa* var. *pendula* (Maxim.) Mast., *C. obtusa* f. *pygmaea* (Gordon) Beissn., *C. obtusa* f. *sanderi* (Mast.) Rehder, *C. obtusa* var. *similofacifera* Makino, *C. obtusa* f. *tetragona* Rehder, *C. obtusa* var. *tetragona aurea* G. Nicholson, *C. obtusa* var. *tsatsumi* Slavin, *C. pendula* Maxim., *C. tsatsumi* (Slavin) Slavin, *Chamaepeuce obtusa* (Siebold&Zucc.) Zucc. ex Gordon, *Cupressus acuta* Lavalley, *C. breviramea* (Maxim.) F.Muell., *C. obtusa* (Siebold&Zucc.) F.Muell., *C. obtusa* subsp. *breviramea* (Maxim.) Silba, *C. obtusa* subsp. *gigantea* Silba, *C. obtusa* var. *pendula* (Maxim.) Mast., *C. obtusa* subsp. *yokohamaensis* Silba, *C. pendens* F.Muell., *Juniperus sanderi* Mast., *Retinispora filicoides* (Hartw. & Rümpler) Veitch ex Gordon, *R. fusinoki* Zucc. Ex Gordon, *R. lycopodioides* Gordon, *R. monstrosa* Carrière, *R. obtusa* Siebold&Zucc., *R. obtusa* var. *albaspicata* R.Sm., *R. obtusa* var. *argentea* Fortune ex Gordon, *R. obtusa* var. *aurea* Fortune ex Gordon, *R. obtusa* var. *breviramea* (Maxim.) A.V.Bobrov&Melikyan, *R. obtusa* var. *compacta* Gordon, *R. obtusa* var. *gracilis-aurea* R.Sm., *R. obtusa* var. *ketelerii* Standish ex Gordon, *R. obtusa* var. *magnifica* R.Sm., *R. obtusa* var. *nana-aurea* R.Sm., *R. obtusa* var. *pygmaea* Gordon, *R. sanderi* (Mast.) Sander, *R. tetragona* R.Sm., *Shishindenia ericoides* (Boehm. ex Beissn.) Makino ex Koidz., *Thuja obtusa* (Siebold&Zucc.) Mast., *T. obtusa* var. *pendula* (Maxim.) Mast.

3.Systematic Position:

Christenhusz et al. (2011)

· Class: Equisetopsida C. Agardh

- Subclass: GnetidaePax
- Order: Cupressales Link
- Family: Cupressaceae Gray
- Genus: *Chamaecyparis*Spach
- Species: *C. obtusa*(Siebold&Zucc.) Endl.

Bentham and Hooker (1862)

Kingdom: Plantae

Division:Phanerogamia

Class: Gymnospermeae

Ordo: Coniferae

Tribus:Cupressineae

4.Distribution:

Global:Native of central Japan (Honshu, Kyushu, Shikoku); Taiwan, Province of China

India:

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

6.Threat Status:

IUCN:Near Threatened

BSI:

7.Habit and Habitat:Slow growing tree, 35 m tall, *C.obtusa* is generally occupying more xeric sites on ridges or slopes.

8.Life Form:Phanerophytes

9.EconomicImportance:Timber, ornamental, this has been one of the most important species used in Japanese architecture, the wood of *C.obtusa* has been used for centuries in construction of temples and other traditional buildings because of its fine quality and high durability in outdoor conditions.

10. Probable Progenitor of:

11.DNA

C-value Methodology

2C (27.44 pg)7Feulgenmicrodensitometry7

2C (20.02 pg)2 Flow cytometry2

2C (18.60pg)9 Flow cytometry9

12.Basic chromosome number(s): $x=11$ 1,3, 4, 5, 6, 7, 14

13. Zygotic chromosome number(s): $2n=22$ 4, 5, 6, 7, 10

14. Gametic chromosome number(s): $n=11$ 1, 5, 6, 14

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

chromosomes/Neocentric chromosomes):

Image file

16.Ploidy level:Diploid1, 4, 5, 6, 7, 10, 14

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

Karyotype Median and submedian4, 10

Chromosome sizeLarge4, 10

NOR chromosome(s)2 10

Degree of asymmetrySymmetrical4, 10

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22. Banding pattern(s):CMA+ bands 10

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 meiosis11 II 1, 5, 6, 14

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.):