

Species Datasheet

Datasheet No. G-011.009.001
(family.genus.species)

DBT- Network P

1.Taxon:

Species: *Platyclusorientalis*(L.) Franco

Subspecies:

Variety:

Cultivar:

Hybrid:

Image file

2. **Synonyms:** *Biotachengii* (Borderes&Gaussen) Borderes&Gaussen, *B. coraana* Siebold ex Gordon, *B. dumosa* Carriere, *B. elegantissima* Beissn., *B. ericoides* Carriere, *B. excelsa* Gordon, *B. falcata* Carriere, *B. fortunei* Carriere, *B. freneloides* Gordon, *B. funiculata* Gordon, Knight, *B. intermedia* Gordon, *B. japonica* Siebold ex Gordon, *B. macrocarpa* Gordon, *B. meldensis* M.A. Lawson ex Gordon, *B. nepalensis* Endl. ex Gordon, *B. orientalis* (L.) Endl., *B. orientalis* var. *aurea* Carriere, *B. orientalis* var. *beverleyensis* Hu, *B. orientalis* var. *cristata* Carriere, *B. orientalis* var. *cupressoides* Carriere, *B. orientalis* var. *elegantissima* Rollison ex Gordon, *B. orientalis* var. *falcata* Carriere, *B. orientalis* var. *fernandiana* Lavallee, *B. orientalis* var. *filiformis* (Lodd. ex Lindl.) Henkel & Hochst., *B. orientalis* var. *flagelliformis* (Jacques) Hoopes, *B. orientalis* var. *pendula* (Thunb.) Carriere, *B. orientalis* var. *semperaurescens* Lemoine ex Gordon, *B. orientalis* f. *sieboldii* W.C. Cheng & W.T. Wang, *B. pendula* (Thunb.) Endl., *B. prostrata* Gordon, *B. pyramidalis* Carriere, *B. semperaurescens* Beissn., *B. stricta* (Spach) Lindl. & Gordon, *B. tatarica* Lindl. & Gordon, *B. variegata* Gordon, *B. wareana* Gordon, *B. zuccarinii* Siebold ex Carriere, *Chamaecypariddecussata* Carriere, *C. glauca* Carriere, *Cupressusfiliformis* Beissn., *C. pendula* Thunb., *C. thuja* O. Targ. Tozz., *C. thuyia* O. Targ. Tozz., *Juniperusericoides* Carriere, *Platycluschengii* (Borderes&Gaussen) A. V. Bobrov, *P. orientalis* subsp. *chengii* (Borderes&Gaussen) Silba, *P. stricta* Spach, *Retinisporadecurvata* Carriere, *R. decussata* Gordon, *R. ericoides* Zucc. ex Gordon, *R. flavescens* Beissn., *R. juniperoides* Carriere, *R. recurvata* Mast., *R. rigida* Carriere, *Thujaacuta* Moench, *T. antarctica* Gordon, *T. argentea* Carriere, *T. aurea* Carriere, *T. australis* Ten., *T. chengii* Bordères & Gaussen, *T. decora* Salisb., *T. dum* Laws. ex K. Koch, *T. filiformis* Lodd. ex Lindl., *T. flagelliformis* (Jacques) C. Lawson, *T. fortunei* Carriere, *T. freneloides* Carriere, *T. funiculata* Gordon, *T. glauca* Carriere, *T. gracilifolia* Knight ex Parl., *T. hybrida* Carriere, *T. intermedia* Gordon, *T. meldensis* Quetier, *T. minor* Paul ex Gordon, *T. monstrosa* Gordon, *T. nepalensis* Lodd. ex Carriere, *T. orientalis* L., *T. orientalis* var. *argyi* Lemee & H. Lev., *T. orientalis* f. *aurea* (Carrière) Rehder, *T. orientalis* var. *aurea-conspicua* Rehder, *T. orientalis* f. *beverleyensis* (Rehder) Rehder, *T. orientalis* var. *beverleyensis* Rehder, *T. orientalis* var. *conspicua* Berckm. ex Rehder, *T. orientalis* f. *conspicua* (Berckm. ex Rehder) Rehder, *T. orientalis* f. *elegantissima* (Rollison ex Gordon) C. K. Schneid., *T. orientalis* var. *flagelliformis* Jacques, *T. orientalis* f. *flagelliformis* (Jacques) Rehder, *T. orientalis* f. *juniperoides* (Carriere) Asch. & Graebn., *T. orientalis* f. *meldensis* (M.A. Lawson ex Gordon) Rehder, *T. orientalis* var. *mexicana* Dummer, *T. orientalis* var. *pendula* (Thunb.) Mast., *T. orientalis* var. *pendula* (Endl.) Carriere, *T. orientalis* var. *semperaurescens* (Lemoine ex Gordon) G. Nicholson, *T. orientalis* f. *semperaurescens* (Lemoine ex Gordon) C. K. Schneid., *T. orientalis* var. *sieboldii* C. Lawson, *T. pendula* (Thunb.) D. Don, *T. pygmaea* Carriere, *T. pyramidalis* Ten., *T. pyramidalis* f. *stricta* (Rehder) Rehder, *T. pyramidalis* var. *stricta* John Mill., *T. semperaurea* Beissn., *T. semperaurescens* K. Koch, *T. stricta* Gordon, *T. tatarica* Lodd. ex G. Don, *T. versaffeltii* Parl., *T. zuccariniana* Voss, *Widdringtoniaglauca* (Carriere) Carriere

3.Systematic Position:

Christenhusz et al. (2011)

- Class: Equisetopsida C. Agardh
- Subclass: Pinidae Cronquist
- Order: Cupressales Link
- Family: Cupressaceae Gray
- Genus: *Platyclus* Spach
- Species: *P. orientalis* (L.) Franco

Bentham and Hooker (1862)

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

4.Distribution:

Global: China (Gansu, Hebei, Henan, Nei Mongol, Shaanxi, Shanxi); Federation; Korea, Russian Tajikistan; Uzbekistan,

India: Introduced in various gardens

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

6.Threat Status:

IUCN: Near Threatened

BSI:

7.Habit and Habitat: Shrub or small tree, *P. orientalis* is most probably a species of the transitional open woodland zone between the steppes of Inner Mongolia and the deciduous oak, oak-birch, and oak-pine forests of NE China.

8.Life Form: Phanerophytes

9.Economic Importance: The wood is used for building and construction of houses and temples where there are still trees of good size left. The foliage is in some parts of China much used for incense burning. Also used as Ornamental tree

10. Probable Progenitor of:

11.DNA

C-value Methodology

2C (22.79pg) ⁷Feulgen microdensitometry⁷

2C (20.92 pg)² Flow cytometry²

2C (20.4 pg) ¹² Flow cytometry¹²

12.Basic chromosome number(s): $x=11^{1, 3, 4, 5, 6, 7, 8, 9, 11, 13}$

13. Zygotic chromosome number(s): $2n=22^{1, 4, 5, 6, 7, 8, 9, 11, 13, 19, 22, 24, 33, 44}^{10}$

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

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

Image file

16.Ploidy level:Diploid^{1, 4, 5, 6, 7, 8, 9, 11, 13} ,Triploid, Tetraploid, Aneuploids(Sporadic) 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, 5, 6, 13}

Karyotype Median and submedian^{4, 5, 6, 13}

Chromosome sizeLarge^{4, 5, 6, 13}

NOR chromosome(s)²¹³

Degree of asymmetrySymmetrical^{4, 5, 6, 13}

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 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.):