

Species Datasheet

Datasheet No. G-007.004.003
(Family.genus.species)

DBT- Network Programme

1.Taxon:

Species: *Picea orientalis* (L.) Peterm.

Subspecies:

Variety:

Cultivar:

Hybrid:

Image file

2. Synonyms: *Abies orientalis* (L.) Poir., *A. wittmanniana* Voss, *Picea orientalis* f. *atrovirens* Schelle, *P. orientalis* var. *aurea* Otto, *P. orientalis* f. *aurea* (Otto) Beissn., *P. orientalis* f. *aureospicata* Beissn., *P. orientalis* var. *nana* Carriere, *P. orientalis* f. *nana* (Carriere) Rehder, *P. orientalis* f. *nutans* Schelle, *P. withmanniana* Carriere, *P. wittmanniana* Fisch. ex Gordon, *Pinus orientalis* L.

3.Systematic Position:

Christenhusz et al. (2011)

Class: Equisetopsida C. Agardh

Subclass: Pinidae Cronquist

Order: Pinales Gorozh.

Family: Pinaceae Spreng.

Genus: *Picea* A. Dietr.

Species: *P. orientalis* (L.) Peterm.

Bentham and Hooker (1862)

Kingdom: Plantae

Division: Phanerogamia

Class: Gymnospermeae

Ordo: Coniferae

Tribus: Abietineae Eichler

Genus: *Picea* A. Dietr.

Species: *P. orientalis* (L.) Peterm.

4.Distribution:

Global: Native to Georgia; Russian Federation; Turkey

India:

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

6.Threat Status:

IUCN: Least concern

BSI:

7.Habit and Habitat: Large evergreen tree (30-45 m tall), Dark coniferous and mixed forests made up of Oriental Spruce are vertically spread from 600 to 2,100 m a.s.l.

8.Life Form:Phanerophytes

9.Economic Importance:An important timber tree

10. Probable Progenitor of:

11.DNA

C-value Methodology

2C (37.16pg) 15 Feulgenmicrodensitometry15

12.Basic chromosome number(s): $x=125, 6, 8, 16$

13. Zygotic chromosome number(s): $2n=245, 6, 16$

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

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

Image file

16.Ploidy level:Diploid5, 6, 16

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:5, 6

KaryotypeMedian and submedian5, 6

Chromosome sizeLarge5, 6

NOR chromosome(s)85

Degree of asymmetrySymmetrical5, 6

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;Translocationsetc.):**