

Species Datasheet

(Family.genus.species)

Datasheet No. G-007.004.001

DBT- Network Programme

1.Taxon:

Species: *Picea glauca* (Moench) Voss

Subspecies:

Variety:

Cultivar:

Hybrid:

Image file

2. Synonyms: *Abies alba* (Münchh.) Michx., *A. alba* var. *caerulea* J.Nelson, *A. alba* var. *nana* Jacques, *A. alba* var. *virescens* (R.Hinterh. & J.Hinterh.) Nyman, *A. arctica* A.Murraybis, *A. canadensis* Mill., *A. canadensis* var. *aurea* J.Nelson, *A. coerulea* Lodd. ex J.Forbes, *A. laxa* (Munchh.) K.Koch, *A. rubra* var. *violacea* Loudon, *A. virescens* R.Hinterh. & J.Hinterh., *Picea acutissima* Beissn., *P. alba* (Munchh.) Link, *P. alba* var. *foetida* Penh., *P. alba* var. *pendula* Carriere, *P. canadensis* (Mill.) Britton, Sterns & Poggenb., *P. canadensis* var. *albertiana* Rehder, *P. canadensis* var. *glauca* (Moench) Sudw., *P. canadensis* f. *parva* Vict., *P. canadensis* var. *pendula* (Carriere) C.K.Schneid., *P. coerulea* (Lodd. Ex J.Forbes) Link, *P. glauca* f. *aurea* (J.Nelson) Rehder, *P. glauca* f. *buxoides* J.R.Schramm, *P. glauca* f. *caerulea* (J.Nelson) Rehder, *P. glauca* f. *conica* Rehder, *P. glauca* var. *glauca*, *P. glauca* f. *glauca*, *P. glauca* f. *nana* (Jacques) Rehder, *P. glauca* f. *parva* Fernald & Weath., *P. glauca* var. *pendula* (Carriere) Hornibr., *P. laxa* Sarg., *P. tschugatskoyae* Carriere, *Pinus abies* var. *alba* Munchh., *P. abies* var. *laxa* Münchh., *P. alba* (Munchh.) Aiton, *P. alba* var. *arctica* (A.Murraybis) Parl., *P. canadensis* Du Roi, *P. canadensis* var. *alba* (Munchh.) Castigl., *P. coerulea* Lodd. ex Loudon, *P. glauca* Moench, *P. laxa* (Munchh.) Ehrh., *P. tetragona* Moench, *P. virescens* Neilr.

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. glauca* (Moench) Voss

Bentham and Hooker (1862)

Kingdom: Plantae

Division: Phanerogamia

Class: Gymnospermeae

Ordo: Coniferae

Tribus: Abietineae Eichler

Genus: *Picea* A. Dietr.

Species: *P. glauca* (Moench) Voss

4.Distribution:

Global:Native to Canada (Alberta, British Columbia, Labrador, Manitoba, New Brunswick, Newfoundland I, Northwest Territories, Nova Scotia, Ontario, Prince Edward I., Québec, Saskatchewan, Yukon); United States (Maine, Michigan, Minnesota, Montana, New Hampshire, New York, South Dakota)

India:

5.Indigenous/Exotic/Endemic;Cultivated/Wild:**6.Threat Status:**

IUCN: Least concern

BSI:

7.Habit and Habitat: Large evergreen tree (15-30 m tall), This species is the major conifer in the vast Boreal forest of North America; it occurs at elevations between 5 m and 1,900 m a.s.l.

8.Life Form:Phanerophytes

9.Economic Importance: Timber, pulp

10. Probable Progenitor of:

11.DNA**C-value Methodology**

2C (40.41pg) 15 Feulgenmicrodensitometry15

2C (32.30 pg) 1 Flow cytometry1

2C (17.00 pg) 25 Feulgenmicrodensitometry25

2C (19.30pg) 24 Feulgenmicrodensitometry24

2C (38.90 pg) 23 Feulgenmicrodensitometry23

12.Basic chromosome number(s): $x=12$ 3, 5, 8, 10, 13,15, 17

13. Zygotic chromosome number(s): $2n=24$ 3, 5, 10, 13,15, 17, 24+0-2B 2, 4, 19

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

15.Specialized chromosomes (B chromosomes/Sex chromosomes/Polytene chromosomes/Neocentric chromosomes):24+0-2B 2, 4, 19

Image file

16.Ploidy level:Diploid3, 5, 10, 13,15, 17

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17.Agametoploidy:

18.Nature of polyploidy (auto, segmental, allo, autoallo):

19.Genomic formula:

20.Aberrant chromosome number(s)(aneuploidy, aneusomaty, polysomaty):

21.Somatic chromosomes:3, 5, 13

Karyotype Median and submedian3, 5, 13

Chromosome size Large3, 5, 13

NOR chromosome(s)14 3

Degree of asymmetry Symmetrical3, 5, 13

Image file

22. Banding pattern(s):

Image file

23.Physical mapping of chromosomes:

In situ hybridization

Image file

Fluorescent in situ hybridiza_on:5S rDNA, 18S-26S rDNA3

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.):