

Genus Datasheet DBT- Network

Datasheet No. G-007.004
Programme
(Family.Genus)

1. Genus: *Picea* A. Dietr.

~~Kingham: Blah~~ Hooker
(1862)
Phon: Phanerogamia
Class: Gymnospermeae
Ordo: Coniferae
Tribus: Abietineae Eichler
Genus: *Picea* A. Dietr.

2. 3. Systematic Position:
Christenhusz et al. (2011)

- Class: Equisetopsida C. Agardh
- Subclass: Pinidae Cronquist
- Order: Pinales Gorozh.
- Family: Pinaceae Spreng.
- Genus: *Picea* A. Dietr.

3. Species:

Global: 40

India: 3

4. Taxonomic riddles: ^{21, 22, 28}

5. Distribution:

Global: Restricted to subtropical high altitude, temperate, and boreal regions of the northern hemisphere.

India: Arunachal Pradesh, Himachal Pradesh, Western Himalaya, Sikkim, Uttarakhand, Uttar Pradesh

6. Habit and Habitat: large trees, occur in high altitudes and boreal region

7. Economic Importance: Useful as a building wood, pulp wood. *P. pungens* is widely planted as an ornamental.

8. DNA content range:

Methodology

2C (17.00-40.41 pg) ^{15, 23, 24, 25, 27}

Feulgenmicrodensitometry^{15, 23, 24, 25, 2}

2C (32.30-42.10 pg) ^{1, 26}

Flow cytometry^{1, 26}

9. Basic chromosome number(s): $x=12$ ^{3, 5, 6, 7, 8, 9, 10, 11, 13, 15, 16, 17}

10. Zygotic chromosome number(s): $2n=24$ ^{3, 5, 6, 7, 9, 10, 11, 13, 15, 16, 17, 18},

$24+0-2B$ ^{2, 4, 19}

1. Gametic chromosome number(s): $n=12$ ^{11, 12}

12. Specialized chromosomes (B chromosomes/Sex chromosomes/Polytene Chromosomes/

Neocentric chromosomes):B Chromosome^{2, 4, 19}

13. Ploidy level:Diploid^{3, 5, 6, 7, 9, 10, 11, 13, 15, 16, 17, 18}

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

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

16. Karyograms: ^{3, 5, 6, 11, 13, 14, 15, 16, 17, 18}

18. Physical mapping of chromosomes: 5S rDNA, 18S-26S rDNA³, 45S rDNA, 5S rDNA, *Sau*

GISH:

19. Phylogenetic relationship at Chromosomal; DNA level:^{21, 22, 28}

20. Cytogenetic mechanism (s) underlying evolution:

21. Linkage map:²⁰

22. Any other information: