

Species Datasheet

Datasheet No. G-007.005.009
(family.genus.species)

1.Taxon:

Species: *Pinus gerardiana* Wall. ex D. Don

Subspecies:

Variety:

Cultivar:

Hybrid:

Image file

2. Synonyms: *Pinus aucklandii* Lodd. ex Gordon, *P. chilghoza* Knight, *P. gerardii* J.Forbes, *P. neosa* Gouan ex W.H.Baxter

3.Systematic Position:

Christenhusz et al. (2011)

- Class: Equisetopsida C. Agardh
- Subclass: Pinidae Cronquist
- Order: Pinales Gorozh.
- Family: Pinaceae Spreng.
- Genus: *Pinus* L.
- Species: *P. gerardiana* Wall. ex D. Don

Bentham and Hooker (1862)

Kingdom: Plantae

Division: Phanerogamia

Class: Gymnospermeae

Ordo: Coniferae

Tribus: Abietineae Eichler

Genus: *Pinus* L.

Species: *P. gerardiana* Wall. ex D. Don

4.Distribution:

Global: Afghanistan; China (Tibet [or Xizang]); India (Jammu-Kashmir); Pakistan

India: North western Himalaya

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

6.Threat Status:

IUCN: Near Threatened

BSI:

7.Habit and Habitat: Tree (10-20 m). *P. gerardiana* grows in the mountains from about 2,000 m to 3,350 m above sea level. In the Himalayas this means that this pine is restricted to valley floors between very high

mountain ranges, which isolate different populations to a certain extent. It prefers dry, sunny slopes where the vegetation is more or less open.

8.Life Form:Phanerophytes

9.Economic Importance:The main economic use of this pine is of its edible, oil-rich seeds, highly valued as dry fruit.

10. Probable Progenitor of:

11.DNA

C-value	Methodology
2C (57.35 pg) ⁶³	Feulgen microdensitometry ⁶³
2C (71.70 pg) ⁹⁶	Flow cytometry ⁹⁶
2C (75.36 pg) ²⁰	Flow cytometry ²⁰

12.Basic chromosome number(s): $x=12$ ^{35, 48, 63, 74, 49}

13. Zygotic chromosome number(s): $2n=24$ ^{48, 49, 63, 75}

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

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

Image file

16.Ploidy level:Diploid ^{48, 49, 63, 75}

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: 48, 49, 75

Karyotype Median and submedian^{48, 49, 75}

Chromosome size Large^{48, 49, 75}

NOR chromosome(s)

Degree of asymmetry Symmetrical^{48, 49, 75}

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.):