

Species Datasheet

Datasheet No. G-007.005.013
(family.genus.species)

1.Taxon:

Species: *Pinus merkusii* Jungh.& de Vriese

Subspecies:

Variety:

Cultivar:

Hybrid:

Image file

2. **Synonyms:** *Pinus finlaysoniana* Wall. exBlume, *P. merkusii* subsp. *ustulata* Businsky, [*P. sumatrana* Mirb.](#)

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.merkusii* Jungh.& de Vriese

Bentham and Hooker (1862)

Kingdom: Plantae

Division: Phanerogamia

Class: Gymnospermeae

Ordo: Coniferae

Tribus: Abietineae Eichler

Genus: *Pinus* L.

Species: *P. merkusii* Jungh.& de Vriese

4.Distribution:

Global: Native of Indonesia and Philippines

India: Arunachal Pradesh, Sikkim

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

6.Threat Status:

IUCN: Vulnerable (IUCN 2.3)

BSI:

7. **Habit and Habitat:** Evergreen tree (25-45 m tall), *P.merkusii* occurs in mountainous regions

8. **LifeForm:** Phanerophytes

9.Economic Importance: Resin, pulp, the wood of higher grade is also used in house construction, panelling and furniture making.

10. Probable Progenitor of:

11.DNA

C-value

Methodology

2C (59.20 pg)³²

Flow cytometry³²

2C (61.80 pg)⁹⁶

Flow cytometry⁹⁶

2C (66.40 pg)²⁰

Flow cytometry²⁰

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

13. Zygotic chromosome number(s): $2n=$

14. Gametic chromosome number(s): $n=12$ ⁴⁹

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

Image file

16.Ploidy level:Diploid⁴⁹

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:

Karyotype

Chromosome size

NOR chromosome(s)

Degree of asymmetry Symmetrical

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 12II⁴⁹

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.):