

# Species Datasheet

Datasheet No. G-007.005.011  
(Family.genus.species)

DBT- Network Programme

## 1.Taxon:

Species: *Pinus kesiya* Royle ex Gordon

Subspecies:

Variety:

Cultivar:

Hybrid:

Image file

**2. Synonyms:** *Pinus cavendishiana* Parl., *P. insularis* var. *khasyana* (Griff.) Silba, *P. kasya* Parl.,  
*P. kasya* Royle ex Parl., *P. khasia* Engelm., *P. khasya* Hook.f., *P. khasyana* Griff.

## 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. kesiya* Royle ex Gordon

## Bentham and Hooker (1862)

Kingdom: Plantae

Division: Phanerogamia

Class: Gymnospermeae

Ordo: Coniferae

Tribus: Abietineae Eichler

Genus: *Pinus* L.

Species: *P. kesiya* Royle ex Gordon

## 4.Distribution:

**Global:** Native to China (Yunnan), India (Meghalaya), Malaysia, Philippines

**India:** North East India

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

## 6.Threat Status:

**IUCN:** Least concern

**BSI:**

**7.Habit and Habitat:**Evergreen tree (30-35 m).*P. kesiya* occurs in pine savannas, pure stands with nearly closed canopy, and mixed pine-broad-leaved forests in valleys with e.g. *Quercus serrata* and *Alnus nepalensis* along streams. It occupies drier sites in North East India, Myanmar and Thailand, at altitudes generally between 800 and 1,500 m a.s.l.

**8.Life Form:**Phanerophytes

**9.Economic Importance:***P. kesiya* is an important timber tree and most common use is for pulpwood in the paper industry

**10. Probable Progenitor of:**

**11.DNA**

**C-value Methodology**

2C (51.40 pg) 32 Flow cytometry

**12.Basic chromosome number(s):** $x=12$  8, 23, 35, 48, 49

**13. Zygotic chromosome number(s):** $2n=24$  8, 23, 48, 49

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

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

Image file

**16.Ploidy level:**Diploid 8, 23, 48, 49

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:** 8, 23, 48, 49

**Karyotype** Median two shorter pairs submedian 8, 23, 48, 49

**Chromosome size** Large 8, 23, 48, 49

**NOR chromosome(s)** 10 23

**Degree of asymmetry** Symmetrical 8, 23, 48, 49

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; Translocation etc.):**