

Species Datasheet

Datasheet No. G-007.005.008 DBT- Network Programme
(Family.genus.species)

1.Taxon:

Species: *Pinus elliottii* Engelm.

Subspecies:

Variety:

Cultivar

Hybrid

Image file

2. Synonyms: *Pinus densa* var. *austrokeysensis* Silba, *P. elliottii* subsp. *austrokeysensis* (Silba) Silba, *P. elliottii* var. *elliottii*, *P. heterophylla* (Elliott) Sudw., *P. taeda* var. *heterophylla* Elliott

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. elliottii* Engelm.

Bentham and Hooker (1862)

Kingdom: Plantae

Division: Phanerogamia

Class: Gymnospermeae

Ordo: Coniferae

Tribus: Abietineae Eichler

Genus: *Pinus* L.

Species: *P. elliottii* Engelm.

4.Distribution:

Global: Native to Southeastern United States

India:

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

6.Threat Status:

IUCN: Least concern

BSI:

7.Habit and Habitat: Evergreentree (18-30 m). *P. elliottii* is a subtropical pine growing in a warm and humid climate at low elevations. Open woodlands, grasslands, disturbed areas of

subtropical regions

8.LifeForm:Phanerophytes

9.EconomicImportance:The timber is harvested for the pulp industry

10. Probable Progenitor of:

11.DNA

C-value Methodology

2C (35.27 pg) 63 Feulgenmicrodensitometry63

2C (46.60 pg) 90 Feulgen microdensitometry90

2C (44.70 pg) 90 Flow cytometry90

2C (45.22pg) 91 Flow cytometry91

2C (49.38pg) 20 Flow cytometry20

12.Basic chromosome number(s): $x=12$ 8, 15, 23, 34, 35, 62, 63, 74

13. Zygotic chromosome number(s): $2n=248$, 15, 23, 62, 63, 74

14. Gametic chromosome number(s): $n=1234$

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

Image file

16.Ploidylevel:Diploid 8, 15, 23, 34, 62, 63, 74

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: 15, 23, 62, 74

KaryotypeMedian shortest pair submedian15, 23, 62, 74

Chromosome sizeLarge15, 23, 62, 74

NOR chromosome(s)1615

Degree of asymmetrySymmetrical15, 23, 62, 74

Image file

22. Banding pattern(s): CMA+, DAPI+ bands15

Image file

In situ hybridization

Image file

Fluorescent in situ hybridization: 18S-25S rDNA, 5S rDNA¹⁵
Image file

24. Genomic in situ hybridization:
Image file

25. Linkage map:^{57, 76}
Image file

26. Chromosome associations:
Female meiosis
Male meiosis^{12 II34}
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.):