

Species Datasheet

Datasheet No. G-007.005.017
(family.genus.species)

1.Taxon:

Species: *Pinus pinaster* Aiton

Subspecies:

Variety:

Cultivar:

Hybrid:

Image file

2. Synonyms:*Pinus corteana* Beissn., *P. detritis* Carriere, *P. glomerata* Salisb., *P. halepensis* var. *maritima* Loudon, *P. helenica* K.Koch, *P. lemoniana* Benth, *P. maritima* Lam., *P. maritima* var. *major* Loisel., *P. maritima* var. *minor* Loisel., *P. minor* Loudon, *P. monspeliensis* Salzm. ex Duval-Jouve, *P. neglecta* H.Low ex Gordon, *P. nigrescens* Ten., *P. nova-zelandica* Lodd. ex G.Don, *P. pinaster* subsp. *acutisquama* (Boiss.) Rivas Mart., A.Asensi, Molero Mesa & F.Valle, *P. pinaster* var. *acutisquama* Boiss., *P. pinaster* var. *lemoniana* (Benth.) Loudon, *P. pinaster* var. *minor* (Loisel.) Carriere, *P. pinaster* var. *pendula* J.Nelson, *P. sancta-helenica* Loudon ex Carriere, *P. scarina* Steud., *P. syrtica* Thore

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. pinaster* Aiton

Bentham and Hooker (1862)

Kingdom: Plantae

Division: Phanerogamia

Class: Gymnospermeae

Ordo: Coniferae

Tribus: Abietineae Eichler

Genus: *Pinus* L.

Species: *P. pinaster* Aiton

4.Distribution:

Global: Indigenous to Mediterranean region.

India: Introduced

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

6. Threat Status:

IUCN: Least concern

BSI:

7. Habit and Habitat: Evergreen tree. *Pinaster* is mainly a pine of low-lying, coastal plains, usually on sandy soils of sea shore dunes and flats

8. Life Form: Phanerophytes

9. Economic Importance: An important timber tree as well as Europe's major source of turpentine since the 16th century.

10. Probable Progenitor of:

11. DNA

C-value

Methodology

2C (48.70 pg)⁶³

Feulgenmicrodensitometry⁶³

2C (57.80 pg)⁹⁶

Flow cytometry⁹⁶

2C (61.84 pg)²⁰

Flow cytometry²⁰

12. Basic chromosome number(s): $x=12$ ^{23, 35, 63, 79}

13. Zygotic chromosome number(s): $2n=24$ ^{23, 63, 79}

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

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

Image file

16. Ploidy level: Diploid^{23, 63}

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:²³

KaryotypeMedian two shorter pairssubmedian²³

Chromosome sizeLarge²³

NOR chromosome(s)6²³

Degree of asymmetrySymmetrical²³

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:^{6, 10, 50, 66, 67}

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^{45, 71}

29. Any other information (Apomixis; Inversion; Male sterility; Pollen grain mitosis; Pollen stainability; Translocation etc.):