Species Datasheet

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Datasheet No. G-009.003.001
(family.genus.species)

1.Taxon:

Species: *Podocarpusmacrophyllus*(Thunb.) Sweet
Subspecies:
Variety:
Cultivar
Hybrid

Image file

2. Synonyms:*Margbensonia forrestii* (Craib&W.W.Sm.) A.V.Bobrov&Melikyan, *M. macrophylla* (Thunb.)A.V.Bobrov&Melikyan, *M. sweetii* (C.Presl) A.V.Bobrov&Melikyan,*Nageia macrophylla* (Thunb.)F.Muell.,*N. macrophylla* (Thunb.) Kuntze, *Podocarpus canaliculatus* Carriere, *P. forrestii* Craib&W.W.Sm., *P. longifolia* Gordon, *P. macrophyllus* var. *angustifolius* Blume, *P. macrophyllus* subsp. *angustifolius*(Blume) Silba, *P. macrophyllus* f. *angustifolius* (Blume) Pilg., *P. macrophyllus* subsp. *forrestii* (Craib&W.W.Sm.) Silba, *P. macrophyllus* var. *macrophyllus*, *P. macrophyllus* var. *rubra* Carriere, *P. sweetii* C.Presl, *P. verticillatus* G.Don, *Taxus macrophylla* Thunb.,*T. makoya* Forbes

3.Systematic Position:

Christenhusz*et al.* (2011)

- Class: Equisetopsida C. Agardh
- Subclass: PinidaeCronquist
- Order: AraucarialesGorozh.
- Family: PodocarpaceaeEndl.
- Genus: *Podocarpus*L'Hér. ex Pers.
- Species: *P. macrophyllus*(Thunb.) Sweet

Bentham and Hooker (1862)
Kingdom: Plantae
Division:Phanerogamia
Class: Gymnospermeae
Ordo: Coniferae
Tribus:PodocarpeaeDumort.
Genus: *Podocarpus*L'Hér. ex Pers.
Species: *P. macrophyllus*(Thunb.) Sweet

4.Distribution:

Global: South China to North Myanmar, Taiwan, Japan.

India: Planted

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

6.Threat Status:

IUCN: Least concern

BSI:

7.Habit and Habitat: Large shrub, *P. macrophyllus* is a forest species but also occurs in secondary vegetation (thickets and scrub on mountain slopes and hill sides), often along streams. It is one of numerous species in a mixed mesophytic forest formation, largely constituted of deciduous angiosperm trees and shrubs. *P.macrophyllus*occurs from near sea level to around 1,000 m a.s.l.;

8.Life Form: Phanerophytes

9.Economic Importance: Amenity tree, this species is planted for hedges

10. Probable Progenitor of:

11.DNA
C-value 2C Methodology

12.Basic chromosome number(s):x=19[4, 5]

13. Zygotic chromosome number(s):2n=37, 37+7B, (male) 38 (female)[3]

38[5, 6]

14. Gametic chromosome number(s):19 (endosperm mitosis)[4, 5]

18,19[3]

15.Specialized chromosomes (B chromosomes/Sex chromosomes/Polytene chromosomes/Neocentric chromosomes):XXY sex chromosome system, 7B's [3]

Image file

16.Ploidylevel: Diploid[3, 5, 6]

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:[3]

KaryotypeAll telocentric chromosomes (female), 1 large metacentric and 36 telocentric chromosomes (male) [3]

Chromosome size Large[3]

NOR chromosome(s)2[3]

Degree of asymmetry Asymmetrical[3]

Image file

22. Banding pattern(s):CMA^+, $DAPI^+$ bands[3, 7]

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 meiosis17II+1III[3, 7]

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.):