

Species Datasheet

Datasheet No. A-377.011.007
(family.genus.species)

DBT- Netw

1.Taxon:

Species: *Justiciabetonica*L.

Subspecies

Variety

Cultivar

Hybrid

Image file

2. Synonyms:*Adhatodabetonica*(L.) Nees, *A.cheiranthifolia*Nees, *A.lupulina*Nees, *A. ramosissima*Nees, *A.trinervia* (Vahl) Nees, *A.variegata* var. *pallidior*Nees, *Betonicafrutescens*Bontekoe, *Diclipteralupulina*C.Presl, *Ecboliumbetonica* (L.) Kuntze, *Gendarussabetonica*Nees ex Steud., *Justiciaantidota* Sm. ex T.Anderson, *J.betonicoide*sC.B. Clarke, *J.cheiranthifolia* C.B. Clarke, *J.lupulina*E.Mey., *J.ochroleuca*Blume, *J.pallidior* (Nees) C.B. Clarke, *J.pseudobetonica* Roth, *J.ramosissima*Roxb. exHornem., *J.trinervia*Vahl, *J.uninervis* S. Moore, *Nicotetabetonica* (L.) Lindau, *N.trinervia* (Vahl) Lindau, *Rhyticalymmaochroleucum* (Blume) Bremek.

3. Systematic Position:

- APG IV (2016)
- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Eudicots
- Clade: Superasterids
- Clade: Asterids
- Order: LamialesBromhead
- Family:Acanthaceae Juss.
- Genus: *Justicia*L.
- Species: *J.betonica*L.

Bentham and Hooker (1862)

- Kingdom: Plantae
- Division: Phanerogamia
- Class: Dicotyledons
- Subclass: Gamopetalae
- Series: Bicarpellatae
- Cohors: Personales
- Ordo: Acanthaceae Juss.
- Genus:*Justicia*L.
- Species: *J.betonica*L.

4.Distribution:

Global:India, Sri Lanka, Old World Tropics

India:Kerala, Maharashtra, Tamil Nadu, Nagar Haveli, Karnataka

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

6.ThreatStatus:

IUCN:

BSI

7.Habit and Habitat:Shrub. Wastelands, moist deciduous forests

8.Life Form:Chamaephytes

9.Economic Importance:

10. Probable Progenitor of:

11.DNAC-valueMethodology

12.Basic chromosome number(s):

13. Zygotic chromosome number(s): $2n=28^6$, $2n=34^6$, 7, 8, 9, 10

14. Gametic chromosome number(s): $n=17^7$, 8, 9, 10

15.Specialized chromosomes (B chromosomes/Sex chromosomes/Ringchromosomes/etc):

Image file

16.Ploidy level:Diploid^{7, 8, 9, 10}

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 –Majority metacentric and sub metacentric⁹

Chromosome size

NOR chromosome(s)

Degree of asymmetry: Symmetrical⁹

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

27. Chromosome distribution at anaphase I:

28. Genetic diversity:

Chromosomal level-Yes⁶

DNA level

29. Any other information: