

Final Species Datasheet

Datasheet No. G-002.001.001 DBT- Network Programme
(Family.genus.species)

1.Taxon:

Species:*Boweniaserrulata* (W.Bull) Chamb.

Subspecies:

Variety:

Cultivar:

Hybrid:

Image file

2. Synonyms:*Boweniaspectabilis* var. *serrata*F.M.Bailey, *B.spectabilis* var. *serrulata*W.Bull

3.Systematic Position:

Christenhuszet al. (2011)

- Class: Equisetopsida C. Agardh
- Subclass: CycadidaePax
- Order: Cycadales Pers.
- Family:Zamiaceae Horan.
- Genus:*Bowenia*Hook. exHook.f.
- Species: *B.serrulata* (W. Bull) Chamb.

Bentham and Hooker (1862)

Kingdom: Plantae

Division:Phanerogamia

Class: Gymnospermeae

Ordo: Cycadaceae Pers.

Tribus:Encephalarteae

Genus: *Encephalartos*Lehm.

Species:*E.serrulata*(W. Bull) Chamb.

4.Distribution:

Global: Endemic to the vicinity of Byfield, Australia,

India:Uttar Pradesh

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

6.Threat Status:

IUCN: Least Concern

BSI:

7.Habit and Habitat:Scattered and locally abundant in dry sclerophyll eucalypt forest. Also found in dense,

Sheltered, moist areas in open forest, coastal sclerophyll forest only slightly above sea level
Sheltered, moist areas in open forest, sometimes in moderately dry sites.

8.LifeForm:Phanerophytes

9.Economic Importance:

10. Probable Progenitor of:

11.DNA

C-value2C (25.56pg)⁴**Methodology**Flowcytometry⁴

12.Basic chromosome number(s): $x=9$ 1, 2, 3 , 8

13. Zygotic chromosome number(s): $2n=18$ 2, 3, 5, 7

14. Gametic chromosome number(s): $n=9$ 8

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

Image file

16.Ploidy level:Diploid^{2, 3, 5, 7}

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, 5}

Karyotype mediansubmedian and subterminal^{3, 5}

Chromosome sizeLarge^{3, 5}

NOR chromosome(s)⁴³

Degree of asymmetryModerately asymmetrical^{3, 5}

Image file

22. Banding pattern(s):

Image file

23.Physical mapping of chromosomes:

In situ hybridization

Image file

Fluorescent in situ hybridization rDNA³

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;Translocationsetc):