

Species Datasheet

DBT- Network Programme

Datasheet No. G-012.001.002
(family.genus.species)

1.Taxon:

Species: *Cephalotaxusharringtonii* (Knight ex J.Forbes) K.Koch

Subspecies:

Variety:

Cultivar

Hybrid

Image file

2. Synonyms: *Cephalotaxusdrupacea* Siebold&Zucc., *C.drupacea* f. *fastigiata* (Carriere)

Pilg., *C.drupacea* var.

harringtonii (Knight ex J.Forbes) Pilg., *C.drupacea* var. *koreana* (Nakai) Hatus., *C.drupacea* var. *pedunculata*

(Siebold&Zucc.) Miq., *C.drupacea* f. *sphaeralis* (Mast.) Pilg., *C.fortunei* var.

foemina Carriere, *C.*

harringtonia var. *fastigiata* (Carriere) Rehder, *C.harringtonii* subsp. *drupacea*

(Siebold&Zucc.)

Silba, *C.harringtonii* var. *drupacea* (Siebold&Zucc.) Koidz., *C.harringtonii* f. *drupacea*

(Siebold&Zucc.)

Kitam., *C.harringtonii* f. *fastigiata* (Carrière) Rehder, *C. harringtonii* var. *fastigiata* (Carriere)

C.K.Schneid., *C.harringtonii* var. *harringtonii*, *C.harringtonii* subsp. *koreana* (Nakai)

Silba, *C.harringtonii* f.

sphaeralis (Mast.) Rehder, *C.harringtonii* var. *sphaeralis* (Mast.)

C.K.Schneid., *C.koreana* Nakai, *C.pedunculata* Siebold&Zucc., *C.pedunculata* var.

fastigiata Carriere, *C.pedunculata* var. *sphaeralis* Mast., *Nageiakoraiana* (Siebold ex Endl.)

Kuntze, *Podocarpuskoraiana* C. Siebold ex Endl., *P.koraianus* Siebold ex

Endl., *Taxusbaccata* Thunb., *T.coriacea* Knight, *T.drupacea* (Siebold&Zucc.)

C.Lawson, *T.harringtonii* Knight

ex J.Forbes, *T.inukaja* Knight, *T.japonica* Lodd. ex Gordon, *T.pedunculata* (Siebold&Zucc.)

C.Lawson

3.Systematic Position:

Christenhusz et al. (2011)

Class: Equisetopsida C. Agardh

Subclass: Gnetidae Pax

Order: Cupressales Link

Family: Taxaceae Gray

Genus: *Cephalotaxus* Siebold&Zucc. ex Endl.

Species: *C. harringtonii* (Knight ex J.Forbes)

K.Koch

Bentham and Hooker (1862)

Kingdom: Plantae

Division: Phanerogamia

Class: Gymnospermeae

Ordo: Coniferae

Tribus: Taxeae Rich. ex Duby

Genus: *Cephalotaxus* Siebold & Zucc. ex Endl.

Species: *C. harringtonii* (Knight ex J. Forbes)

K. Koch

4. Distribution:

Global: Native of Japan

India: Uttarakhand (FRI at Dehradun and Nainital)

5. Indigenous/Exotic/Endemic; Cultivated/Wild: Cultivated**6. Threat Status:**

IUCN: Least concern

BSI:

7. Habit and Habitat: Small evergreen shrub or tree, *C. harringtonii* in its tree form is a component of both broad-leaved (angiosperm) forest and coniferous forest, or mixed forest

8. Life Form: Phanerophytes

9. Economic Importance: In general this species is probably too small to be a useful timber. However it is grown as an ornamental in many northern hemisphere countries.

10. Probable Progenitor of:**11. DNA**

C-value 2C(50.70pg) **5 Methodology** Flow cytometry **5**

12. Basic chromosome number(s): $x=12$ 2, 3, 4, 9

13. Zygotic chromosome number(s): $2n=$

14. Gametic chromosome number(s): $n=12$ 4, 8, 9, 12 (endosperm mitosis) 3

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

Image file

16. Ploidy level: Diploid^{3, 4}

Image file

17. Agametoploidy:

18. Nature of polyploidy (auto, segmental, allo, autoallo):

19. Genomic formula:

20. Aberrant chromosome number(s) (aneuploidy, aneusomy, polysomy):

21. Somatic chromosomes: 3

Karyotype Mostly median one submedian³

Chromosome size Large³

NOR chromosome(s) 1³ (endosperm mitosis)

Degree of asymmetry Symmetrical³

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 Trees with normal meiosis: 12 II

Trees with abnormal meiosis: Some II's show early disjunction, majority of cells show irregularly

distributed II's⁸

12 II⁹

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.):