

Species Datasheet

-
Datasheet No. P-001.002.013
- (family.genus.species)

DBT- Network Programme

1. Taxon:

Species: *Huperzia serrata* (Thunb.) Trevis.

Subspecies:

Variety:

Cultivar

Hybrid

Image file

2. Synonyms:

Huperzia selago var. *serrata* (Thunb.) Á.Löve & D.Löve

Huperzia serrata f. *intermedia* (Nakai) Ching

Huperzia serrata f. *longipetiolata* (Spring) Ching

Lycopodium javanicum Sw.

Lycopodium sargassifolium Liebm.

Lycopodium serratum Thunb.

Lycopodium serratum f. *intermedium* Nakai

Lycopodium serratum var. *javanicum* (Sw.) Makino

Lycopodium serratum var. *longipetiolatum* Spring

Lycopodium serratum var. *myriophyllifolium* Hayata

Lycopodium serratum var. *thunbergii* Makino

Urostachys javanicus (Sw.) Herter

Urostachys myriophyllifolius (Hayata) Herter

Urostachys serratus (Thunb.) Herter

Urostachys serratus (Thunb.) Herter ex Nessel

Urostachys serratus var. *japonicaneotropicus* Herter ex Nessel

3. Systematic Position:

Christenhusz 2011

- Class: Equisetopsida C.Agardh
- Subclass: Lycopodiidae Bek.
- Order: Lycopodiales DC.ex Bercht & J.Presl
- Family: Lycopodiaceae P.Beauv. & J.Presl
- Subfamily:
- Genus: *Huperzia* Bernh.

- Species: *Huperzia serrata* (Thunb.) Trevis.
- Subspecies:
- Variety:

4.Distribution:

Global:China (Fujian, Guangdong, Guangxi, Guizhou, Hebei, Heilongjiang, Hubei, Hunan, Jiangxi, Jilin, Liaoning, Shaanxi, Sichuan, Yunnan), Tibet, Japan, Ryukyu Isl., North Korea, South Korea, Russian Far East, India, Bhutan, Nepal, Myanmar [Burma], Sri Lanka, Vietnam, NE- and peninsular Thailand, peninsular Malaysia (Pahang, Perak), Borneo (Sabah, Mt. Kinabalu), Sulawesi, Sumatra, Moluccas (Seram), Philippines, Lesser Sunda Isl. (Lombok), Solomon Isl. (Guadalcanal), Cuba, Hispaniola (Haiti), Mexico (Hidalgo, Oaxaca), Hawaii (Kauai, Oahu, Molokai, Lanai, Hawaii Isl.), New Caledonia, ?Fiji (?VitiLevu), Western Samoa (Savaii), Australia (NE-Queensland)

India: West Bengal, Sikkim, Arunachal Pradesh, Assam, Meghalaya, Manipur, Tamil Nadu, Darjeeling

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

6.Threat Status:

IUCN:Secure

BSI:

7.Habit and Habitat:Terrestrial, primary forest

8.Life Form:

9.Economic Importance:The plant contains a biologically active compound known as HuperzineA, which is prized throughout the nootropic industry for its memory-boosting benefits.

10. Probable Progenitor of:

11.DNA

C-value	Methodology
---------	-------------

12.Basic chromosome number(s): $x=11^4$

13. Zygotic chromosome number(s): $2n=528^4$,

204^7

14. Gametic chromosome number(s): $n=264^4$,

102^8 ,

136^8

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

Image file

16.Ploidy level:9-ploid (aneuploid)⁸,

12-ploid (aneuploid)⁸,

48-ploid (sexual)⁴

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

Chromosome size

NOR chromosome(s)

Degree of asymmetry

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 9-ploid: 102II^8 ,

12-ploid: 136II^8 ,

48-ploid: 264II^4

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.):

