

Species Datasheet

Datasheet No. P-030.010.004
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species: *Onychium japonicum* var. *lucidum* (D. Don) Christ

Subspecies:

Variety: *Onychium japonicum* var. *lucidum* (D. Don) Christ

Cultivar

Hybrid

Image file

2. Synonyms:

Leptostegialucida D. Don

Onychiumlucidum (D. Don) Spreng.

3. Systematic Position:

Christenhusz 2011

- Class: Equisetopsida C. Agardh
- Subclass: Polypodiidae Cronquist, Takht. & Zimmerm.
- Order: Polypodiales Link.
- Family: Pteridaceae E.D.M. Kirchn
- Subfamily: Pteridoideae C. Chr. Ex Crabbe, Jermy & Mickel
- Genus: *Onychium* Kaulf.
- Species: *Onychium japonicum* Thunb. Kunze
- Subspecies:
- Variety: *Onychium japonicum* var. *lucidum* (D. Don) Christ

4. Distribution:

Global: China (Fujian, Gansu, Guangdong, Guangxi, Guizhou, Hubei, Jiangxi, Shaanxi, Sichuan, Xizang, Yunnan, Zhejiang), Bhutan, India, Myanmar, Nepal, Pakistan, Vietnam

India: Himalayas (Uttarakhand, Himachal Pradesh, Darjeeling, Sikkim)

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

6.Threat Status:

IUCN:

BSI:

7.Habit and Habitat:Roadsides, forest margins, mountain slopes; 200-2400 m.

8.Life Form:

9.Economic Importance:

10. Probable Progenitor of:

11.DNA

C-value Methodology

12.Basic chromosome number(s): $x=29^{4, 5, 20, 21, 22, 25}$

13. Zygotic chromosome number(s): $2n=87^{16},$

$116^{6, 12, 13, 22, 23}$

14. Gametic chromosome number(s): $n=58^{4, 5, 20, 21, 22, 25},$

87^{16}

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

Image file

16.Ploidy level:Tetraploid (sexual) $^{4, 5, 6, 12, 13, 20, 21, 22, 25},$

Tetraploid (sterile) $^{22, 23},$

Triploid (apogamous) 16

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 Tetraploid: 58II⁴, 5, 20, 21, 22, 25,

Tetraploid (sterile): 42II+32I^{22, 23},

Triploid (apogamous) : 16-celled sporangium irregular meiosis, 8-celled sporangium 87II¹⁶

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.): Apogamy¹⁶