

Species Datasheet

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Datasheet No. P-030.012.014
(family.genus.species)

DBT- Network Programme

1.Taxon:

Species: *Pteris ensiformis* Burm. f.

Subspecies:

Variety:

Cultivar

Hybrid

Image file

2. Synonyms:

Pteris ensiformis var. *ensiformis*

Pteris serrulata var. *obtusata* Christ

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: *Pteris* L.
- Species: *Pteris ensiformis* Burm.f.
- Subspecies:
- Variety:

4.Distribution:

Global: Asia and the Pacific

India:

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

6.Threat Status:

IUCN:

BSI:

7.Habit and Habitat:

8.Life Form:

9.Economic Importance: It is the most common ingredient of traditional herbal drinks in Taiwan containing different phenolic compounds : [kaempferol 3-O- \$\alpha\$ -l-rhamnopyranoside-7-O-\[\$\alpha\$ -d-apiofuranosyl-\(1-2\)- \$\beta\$ -d-glucopyranoside\]](#), 7-O-[caffeoylhydroxymaltol](#) 3-O- β -d-glucopyranoside, [hispidin](#) 4-O- β -d-glucopyranoside, [kaempferol 3-O- \$\alpha\$ -l-rhamnopyranoside-7-O- \$\beta\$ -d-glucopyranoside](#), [caffeic acid](#), [5-O-caffeoylquinic acid](#), [3,5-di-O-caffeoylquinic acid](#) and [4,5-di-O-caffeoylquinic acid](#).

This plant is resistant to [arsenic](#)-induced oxidative stress.

Cultivated as ornamental

10. Probable Progenitor of:

11.DNA

C-value	Methodology
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12.Basic chromosome number(s): $x=29^{1, 4, 35, 38, 40, 46, 67, 73, 80}$

13. Zygotic chromosome number(s): $2n=87^7$,

c. 116^{20} ,

116^{40}

14. Gametic chromosome number(s): $n=58^{1, 4, 35, 38, 40, 46, 67, 73, 80}$

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

Image file

16.Ploidy level:Tetraploid (sexual)^{1, 4, 20, 35, 38, 40, 46, 67, 73, 80},

Triploid⁷

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 58 II¹, 4, 35, 38, 40, 46, 67, 73, 80

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.):