

# Species Datasheet

Datasheet No. P-029.002.001  
(family.genus.species)

## 1.Taxon:

DBT- Network Programme

**Species:** *Sphenomeris chinensis* (L.) Maxon

Subspecies:

Variety:

Cultivar

Hybrid

Image file

## 2. Synonyms:

*Davalliatenuifolia* var. *lata* Hook. ex T. Moore

*Lindsaeachinensis* (L.) Mett. ex Kuhn

*Microlepiachinensis* (L.) Mett.

*Sphenomerischinensis* var. *chinensis*

*Stenolomachinense* (L.) Bedd.

## 3.Systematic Position:

Christenhusz 2011

- Class: Equisetopsida C.Agardh
- Subclass: Polypodiidae Cronquist, Takht. & Zimmerm.
- Order: Polypodiales Link.
- Family: Lindsaeaceae C.Presl ex M.R.Schomb.
- Subfamily:
- Genus: *Sphenomeris* Maxon
- Species: *Sphenomeris chinensis* (L.) Maxon
- Subspecies:

## 4.Distribution:

**Global:** indigenous to [Hawaii](#), the [Philippines](#), and other parts of the tropics and sub-tropics.

**India:** Himalayas (Himachal Pradesh, Darjeeling, Sikkim, Uttarakhand), Central and South India- Pachmarhi, Palni Hills, Kodaikanal, Shambaganur, Ponmudi, Upper Kothayar Munnar Ootacamund

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

## 6.Threat Status:

IUCN:

BSI:

**7.Habit and Habitat:** commonly found in forest openings and disturbed areas such as landslides, along trails or roads. It grows in moist, shady areas from sea level to an elevation of 1200m

## 8.Life Form:

**9.Economic Importance:**Hawaiians made red-brown dye from the old fronds. Pala'ā was used to treat "female ailments". It is made into a lei using the *hili*, or *hilo* technique - a braiding or plaiting method with only one type of plant material. It is also made into *haku* with other plants using the *wili* or winding method and a backing. The [Ivatan people](#) of the [Batanes](#) islands in the Philippines dry and boil the plant in fresh water until the water turns dark brown to complete black. They consider it as a herbal tea for various health benefits such as better stamina and relief from fatigue

## 10. Probable Progenitor of:

## 11.DNA

C-value      Methodology

**12.Basic chromosome number(s):** $x=47^{6, 7, 13, 15, 16, 18, 19, 20}$ ,  $48^{9, 16}$ ,  $50^{1, 2, 3, 4, 10, 12, 17}$

**13. Zygotic chromosome number(s):** $2n=94^{15, 20}$

$96^9$ ,  
 $188^{6, 7, 13}$ ,  
c. $188^{14}$ ,  
c. $192^9$ ,  
 $194^9$ ,  
 $196^9$ ,  
 $200^{1, 4}$ ,  
c. $200^{2, 10, 12}$ ,  
c. $290^{10, 11, 12}$

**14. Gametic chromosome number(s):** $n=47^{18, 19, 20}$ ,

$48^9$ ,  
 $94^{9, 16}$ ,  
 $96^9$ ,  
  
 $98^9$ ,  
c. $100^{1, 2}$ ,  
 $100^{3, 4, 17}$

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

Image file

**16.Ploidy level:**Diploid (sexual) <sup>9, 15, 18, 19, 20</sup> ,

Tetraploid (sexual) <sup>1, 2, 3, 4, 5, 6, 7, 9, 10, 12, 14, 16, 17</sup>

Hexaploid (sexual) <sup>10, 11, 12</sup>

Mant

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** Diploid:  $47\text{II}^{18, 19, 20}$  ,

$48\text{II}^9$

Tetraploid:  $94\text{II}^{9, 16}$  ,

$96\text{II}^9$  ,

$98\text{II}^9$  ,

c.  $100\text{II}^{1, 2, 5}$  ,

$100\text{II}^{3, 4, 17}$

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.):