# Species Datasheet

**Datasheet No. P-005.001.002**
**(family.genus.species)**

**1.Taxon:**

**DBT- Network Programme**

**Species:** *Psilotum nudum* (L.) P.Beauv.

Subspecies:
Variety:
Cultivar
Hybrid

Image file

**2. Synonyms:**

*Bernhardiaantillarum*Müll. Hal.
*Bernhardiadeppeana*Müll. Hal.
*Lycopodiumnudum* L.
*Psilotumdomingense*Gand.
*Psilotumfloridanum*Michx.
*Psilotumtriquetrum* Sw.
*Psilotumtriquetrum* var. *gracile*Grev. & Hook.
*Tristecanuda* (L.) P. Beauv. ex J. St.-Hil.

**3.Systematic Position:**
**Christenhusz 2011**

- Class: Equisetopsida C.Agardh
- Subclass: Ophioglossidae Klinge
- Order: Psilotales Prantl
- Family: Psilotaceae J.W.Grff & Henfr
- Subfamily:
- Genus: *Psilotum* Sw.
- Species: *Psilotum nudum* (L.) P.Beauv.
- Subspecies:

**4.Distribution:**

**Global:**Tropical Africa, Central America, tropical and subtropical North America, South America,[1] tropical Asia, Australia, Hawaii, southern Japan, Lord Howe Island, New Zealand, with a few isolated populations in SW Europe

**India:**

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

**6.Threat Status:**

**IUCN:**

**BSI:**

**7.Habit and Habitat:**In tropical areas, this plant is often epiphytic, whilst in more temperate areas, such as south-eastern Australia, it is usually found growing in rock crevices

**8.Life Form:**

**9.Economic Importance:**Spores used medicinally as a purge, ornamental

**10. Probable Progenitor of:**

**11.DNA**

| **C-value** | **Methodology** |
|---|---|
| 2C (145.35 pg) [9] | Flow cytometry [9] |

**12.Basic chromosome number(s):**x=52 [7, 10, 13]

**13. Zygotic chromosome number(s):**2n=104[13] ,

c.100[5] ,

c.200[5] ,

208[1, 6, 8] ,

c.208[16] ,

208-210 [8] ,

210-212 [18] ,

307[12] ,

c.312 [11] ,

468[12] ,

**14. Gametic chromosome number(s):**n=52[7, 10] ,

104[1, 4, 6, 8] ,

c.104[16] ,

104+0-2f [14, 15]

156+3small [8] ,

c.156 [17] ,

c.210 [2]

**15.Specialized chromosomes (B chromosomes/Sex chromosomes/Polytene**

**chromosomes/Neocentric chromosomes):**

Image file

**16.Ploidy level:**Diploid (sexual) [5, 7, 10, 13] ,

Triploid (hybrid) [8, 17] ,

Tetraploid (sexual)[1, 4, 5, 6, 8, 14, 15, 16, 18] ,

Hexaploid (Sterile hybrid) [11]

9-ploid (Hybrid) [11]

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:52II[7, 10] ,

Tetraploid: 104II[1, 4, 8, 14, 15] ,

Hexaploid: 20-25multivalents+14-20I+IIs [11], 2VI+3V+18IV+13III+76II+17I [12] ,

9-ploid: 1VI+11IV+14III+120II+136I [12]

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;Translocationsetc.):**