

# Species Datasheet

Datasheet No. P-030.002.003  
(family.genus.species)

DBT- Network Programme

## 1.Taxon:

Species: *Adiantum capillus-veneris* L.

Subspecies:

Variety:

Cultivar

Hybrid

Image file

## 2. Synonyms:

*Adiantum africanum* R. Br.

*Adiantum capillus* Sw.

*Adiantum capillus-veneris* var. *capillus-veneris*

*Adiantum capillus-veneris* f. *dissectum* (M. Martens & Galeotti) Ching

*Adiantum capillus-veneris* var. *fissum* Christ

*Adiantum capillus-veneris* f. *fissum* (Christ) Ching

*Adiantum capillus-veneris* var. *laciniatum* Christ ex Tardieu & C. Chr.

*Adiantum capillus-veneris* var. *modestum* (Underw.) Fernald

*Adiantum capillus-veneris* var. *protrusum* Fernald

*Adiantum capillus-veneris* var. *rimicola* (Sloss.) Fernald

*Adiantum capillus-veneris* var. *trifidum* Christ

*Adiantum coriandrifolium* Lam.

*Adiantum fontanum* Salisb.

*Adiantum formosum* R. Br.

*Adiantum michelii* Christ

*Adiantum modestum* Underw.

*Adiantum paradiseae* Baker

*Adiantum pseudocapillus* Féé

*Adiantum remyanum* Esp. Bustos

*Adiantum schaffneri* E. Fourn.

*Adiantum tenerum* var. *dissectum* M. Martens & Galeotti

*Adiantum trifidum* Willd. ex Bolle

## 3.Systematic Position:

Christenhusz 2011

- Class: Equisetopsida C.Agardh
- Subclass: Polypodiidae Cronquist, Takht. & Zimmerm.
- Order: Polypodiales Link.
- Family: Pteridaceae E.D.M. Kirchn
- Subfamily: Vittarioideae (C. Presl) Crabbe, Jermy & Mickel
- Genus: *Adiantum* L.
- Species: *Adiantum capillus-veneris* L.
- Subspecies:

#### **4.Distribution:**

**Global:** Native to the southern half of the United States from California to the Atlantic coast, through Mexico and Central America, to South America, Eurasia, the Levant in Western Asia, and Australasia

**India:** Himalayas, North Indian Plains, central India, South India

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

#### **6.Threat Status:**

**IUCN:**

**BSI:**

**7.Habit and Habitat:** Grows in temperate and subtropical regions, typically grows in shaded, permanently moist crevices on calcareous rock face (typically limestones) and cliffs, often beside streams or waterfalls or growing directly , 600-3000m

#### **8.Life Form:**

**9.Economic Importance:** This species is almost ubiquitous in plant sales, being sold both in specific plant retail outlets and in domestic furniture outlets. It is understood that almost all of the stock sold derives from horticulture and there is no evidence of collection pressure from the wild. The leaves of this species are used as herbal medicine for respiratory problems.

#### **10. Probable Progenitor of:**

#### **11.DNA**

**C-value**

**Methodology**

**12. Basic chromosome number(s):**  $x=30$ <sup>6, 8, 21, 25, 28, 29, 32, 37, 38, 39, 41, 46, 50, 57, 63, 64, 66, 67, 72, 73, 74, 78, 79, 81, 83, 84, 91, 95, 98, 99, 102, 103, 104, 105, 106, 108, 109, 110</sup>

**13. Zygotic chromosome number(s):**  $2n=60$ <sup>9, 22, 23, 32, 35, 41, 46, 55, 58, 60, 72, 73, 74, 81, 91, 95, 70, 81, 114, 120 (synthetic)<sup>37, 110, 90, 120 (synthetic)<sup>102, 103</sup></sup></sup>

**14. Gametic chromosome number(s):**  $n=30$  6, 8, 21, 25, 28, 29, 32, 37, 38, 39, 41, 46, 50, 57, 63, 64, 66, 67, 72, 73, 74, 78, 79, 81, 83, 84, 91, 95, 98, 99, 102, 103, 104, 105, 106, 108, 109, 110, 31<sup>57, 66, 58, 17</sup>, 60<sup>85</sup>, 90 (apogamous)<sup>85</sup>

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

**chromosomes/Neocentric chromosomes):**

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**16. Ploidy level:** Diploid<sup>6, 8, 21, 25, 28, 29, 32, 37, 38, 39, 46, 50, 57, 63, 64, 66, 67, 72, 73, 74, 78, 79, 81, 83, 84, 91, 95, 98, 99, 102, 103, 104, 105, 106, 108, 109, 110</sup>

Triploid (apogamous)<sup>85</sup>, Tetraploid<sup>85</sup>, Tetraploid (aneuploid)<sup>17</sup>

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**17. Agametoploidy:**

**18. Nature of polyploidy (auto, segmental, allo, autoallo):**

**19. Genomic formula:**

**20. Aberrant chromosome number(s) (aneuploidy, aneusomy, polysomy):** Aneuploidy<sup>17, 57, 66</sup>

**21. Somatic chromosomes:**

**Karyotype**

**Chromosome size**

**NOR chromosome(s)**

## **Degree of asymmetry**

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## **22. Banding pattern(s):**

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## **23. Physical mapping of chromosomes:**

### **In situ hybridization**

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### **Fluorescent in situ hybridization:**

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## **24. Genomic in situ hybridization:**

Image file

## **25. Linkage map:**

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## **26. Chromosome associations:**

### **Female meiosis**

**Male meiosis** Diploid: 30II<sup>37, 50, 74, 84, 108</sup>

Synthesized autotetraploid: 14IV+32II, 15IV+30II, 19IV+22II<sup>102, 103</sup>, 12IV+36II<sup>37</sup>, 13IV+34II<sup>110</sup>

Synthesized autotriploid: 19III+12II+9I<sup>102, 103</sup>

Triploid apogamous: 90II<sup>85</sup>

Image file

## **27. Chromosome distribution at anaphase I:**

## **28. Genetic diversity:**

### **Chromosomal level**

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DNA level

**29.Any other information (Apomixis; Inversion; Male sterility;Pollen grain mitosis;  
Pollen stainability;Translocationetc.):**Triploid apogamous<sup>85</sup>