

# Species Datasheet

Datasheet No. A-074.002.015  
(family.genus.species)

DBT- Network Programme

## 1. Taxon:

Species *Asparagus gonoclados* Baker  
Subspecies  
Variety  
Cultivar  
Hybrid

Image file

2. **Synonyms:** *Protasparagus gonoclados* (Baker) Kamble

## 3. Systematic Position:

- APG IV (2016)**
- Kingdom: Plantae
  - Clade: Angiosperms
  - Clade: Monocots
  - Order: Asparagales
  - Family: Asparagaceae Juss.
  - Genus: *Asparagus* L.
  - Species: *A. gonoclados* Baker

**Bentham and Hooker (1862)**  
Kingdom: Plantae  
Division: Phanerogamia  
Class: Monocotyledones  
Series: Coronarieae  
Ordo: Liliaceae Juss.  
Tribus: Asparageae Dumort.  
Genus: *Asparagus* L.  
Species: *A. gonoclados* Baker

## 4. Distribution:

**Global:** India, Sri Lanka.

**India:** Peninsular India

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

## 6. Threat Status:

**IUCN:**

**BSI:**

7. **Habit and Habitat:** Tall climbers or tangled shrub, with shiny soft stems. Grows in Tropical Dry Forest.

8. **Life Form:** Hemicryptophytes

9. **Economic Importance:** It is used as substitute of well known Ayurvedic Drug Shatavari. It is used as diuretic, galactagogue, antiulcer, antioxidant, antidiabetic, antipyretic and in the treatment of pyorrhoea, spermatorrhoea and urolithiasi.

## 10. Probable Progenitor of:

## 11. DNA

**C- value**

1C (1.17 pg)<sup>8</sup>

2C (2.36 pg)<sup>8</sup>

**Methodology**

Flow cytometry<sup>8</sup>

## 12. Basic chromosome number(s):

13. **Zygotic chromosome number(s):**  $2n= 20$ <sup>8</sup>

$2n= 60$ <sup>2,3</sup>

14. **Gametic chromosome number(s):**  $n= 10$ <sup>5,6</sup>

$n= 30$ <sup>4,22</sup>

15. **Specialized chromosomes (B chromosomes/ Sex chromosomes/ Polytene chromosomes/ Neocentric chromosomes):** B chromosomes (4)<sup>2</sup>

B

Image file

16. **Ploidy level:** Hexaploid<sup>4</sup>

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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** Majority submetacentric chromosomes<sup>3</sup>

**Chromosome size** Very small to small<sup>3</sup>

**NOR chromosome(s)** 4 NOR<sup>3</sup>

**Degree of asymmetry** Low level of asymmetry<sup>3</sup>

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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** 30 II<sup>4</sup>

Image file

27. **Chromosome distribution at anaphase I:** Regular<sup>4</sup>

28. **Genetic diversity:**

**Chromosomal level:**

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**DNA level:**

29. **Any other information (Apoixis; Inversion; Male sterility; Pollen grain mitosis; Pollen stainability; Translocations etc):**

**Pollen stainability:** High (90%)<sup>4</sup>