

Species Datasheet

Datasheet No. A-074.002.008
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species *Asparagus filicinus* Buch.-Ham. ex D.Don

Subspecies

Variety

Cultivar

Hybrid

Image file

2. **Synonyms:** *Asparagus qinghaiensis* Y.Wan, *Protasparagus filicinus* (Buch.-Ham. ex D.Don) Kamble.

3. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Monocots
- Order: Asparagales
- Family: Asparagaceae Juss.
- Genus: *Asparagus* L.
- Species: *A. filicinus* Buch.-Ham. ex D.Don

Bentham and Hooker (1862)

Kingdom: Plantae
Division: Phanerogamia
Class: Monocotyledones
Series: Coronaricae
Ordo: Liliaceae Juss.
Tribus: Asparageae Dumort.
Genus: *Asparagus* L.
Species: *A. filicinus* Buch.-Ham. ex D.Don

4. Distribution:

Global: China, India, East Himalaya, Nepal, West Himalaya, Myanmar, Thailand, Vietnam

India: North- West Himalaya, East Himalaya, Kashmir, Meghalaya, Assam

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

6. Threat Status:

IUCN: Data Deficient

BSI:

7. **Habit and Habitat:** Rhizomatous, erect, perennial herb. Grows in Temperate Mixed Forest

8. **Life Form:** Hemicryptophytes

9. **Economic Importance:** Used in Ayurveda and Veterinary medicine, roots fed to cattle to increase milk production. Shoots and tubers cooked as vegetables; Roots are used to cure weakness, tuberculosis, sexual debility, urinogenital disorders, dysuria.

10. Probable Progenitor of:

11. DNA

C- value

Methodology

12. Basic chromosome number(s):

13. **Zygotic chromosome number(s):** $2n=16$ ²⁷

$2n=18$ ²⁹

$2n=20$ ^{24, 25, 26}

14. **Gametic chromosome number(s):** $n=10$ ¹⁴

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

Image file

16. **Ploidy level:** Diploid^{25, 26}

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 Majority metacentric chromosomes²⁷

Chromosome size Small to medium²⁷

NOR chromosome(s) 2 NOR²⁷

Degree of asymmetry Symmetrical, Stebbin's 2B class²⁷

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 10 II¹⁴

Image file

27. **Chromosome distribution at anaphase I:** Regular¹⁴

28. **Genetic diversity:**

Chromosomal level:

Image file

DNA level:

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