

Species Datasheet

Datasheet No. A-074.002.026
(family.genus.species)

DBT- Network Programme

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1. Taxon:

Species *Asparagus setaceus* (Kunth) Jessop

Subspecies

Variety

Cultivar

Hybrid

Image file

2. Synonyms: *Asparagopsis setacea* Kunth, *Asparagus asiaticus* var. *amharicus* Pic. Serm., *A. lujae* De Wild., *A. plumosus* Baker, *A. plumosus* var. *tenuissimus* auct., *A. zanzibaricus* Baker, *Protasparagus plumosus* (Baker) Oberm., *P. setaceus* (Kunth) Oberm.

3. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Monocots
- Order: Asparagales
- Family: Asparagaceae Juss.
- Genus: *Asparagus* L.
- Species: *A. setaceus* (Kunth) Jessop

Bentham and Hooker (1862)

Kingdom: Plantae
Division: Phanerogamia
Class: Monocotyledones
Series: Coronarieae
Ordo: Liliaceae Juss.
Tribus: Asparageae Dumort.
Genus: *Asparagus* L.
Species: *A. setaceus* (Kunth) Jessop

4. Distribution:

Global: Africa, Comoros.

India: Western India

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

6. Threat Status:

IUCN:

BSI:

7. Habit and Habitat: Climbing shrub; Grows in Tropical Dry Forest and forest margins, rarely in dense bush land on coral; 0–350 m near coast and 750–2300 m inland.

8. Life Form: Hemicryptophyte

9. Economic Importance: Used for wound, diarrhea, abscess, postpartum pains, urination problems, cough, pulmonary infections; Veterinary medicine. It is also used as ornamental purpose.

10. Probable Progenitor of:

11. DNA

C- value

1C (0.72 pg)¹⁵
2C (1.44 pg)¹⁵
2C (1.45 pg)¹⁵
4C (23.88 pg)⁷

Methodology

Flow cytometry¹⁵
Feulgen cytophotometry⁷

12. Basic chromosome number(s):

13. Zygotic chromosome number(s): $2n = 20$ ^{7, 10, 11, 15, 17, 19, 30, 31, 32, 33, 43, 44, 45, 46}

$2n = 30$ ³⁵

14. Gametic chromosome number(s):

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

Image file

16. Ploidy level: Diploid^{7, 10, 11, 44}

Image file

17. Agametoploidy

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

19. Genomic formula:

20. Aberrant chromosome number(s) (aneuploidy, aneusomaty, polysomaty): Varying chromosome number in somatic cells $2n = 18$ ³⁰

21. Somatic chromosomes:

Karyotype Majority metacentric chromosomes¹¹

Chromosome size Very small to small^{11, 30, 44}

NOR chromosome(s) 2 NOR³⁰; 4 NOR^{7, 44}; 6 NOR¹¹

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

Image file

27. Chromosome distribution at anaphase I:

28. Genetic diversity:

Chromosomal level

Image file

DNA level¹⁵

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