

Species Datasheet

Datasheet No. A-074.002.002
(family.genus.species)

DBT- Network Programme

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1. Taxon:

Species *Asparagus africanus* Lam.

Subspecies

Variety

Cultivar

Hybrid

Image file

2. Synonyms: *Asparagopsis juniperina* Kunth, *A. schlechtendalii* Kunth, *A. scoparia* Kunth, *Asparagus africanus* var. *africanus*, *A. africanus* var. *biarticulatus* De Wild. & T.Durand, *A. africanus* var. *microcarpus* Balf.f., *A. africanus* var. *pubescens* Baker, *A. asiaticus* var. *mitis* (A.Rich.) Chiov., *A. burkei* Baker, *A. buruensis* Engl., *A. cooperi* Baker, *A. dependens* Thunb., *A. dinteri* Engl. & Krause, *A. fleckii* Schinz, *A. francisci* K.Krause, *A. irregularis* Baker, *A. judtii* Schinz, *A. mitis* A.Rich., *A. multiflorus* Baker, *A. patens* K.Kraus, *A. rivalis* Burch. ex Schult. & Schult.f., *A. sennii* Chiov., *A. sidamensis* Cufod., *Protasparagus africanus* (Lam.) Oberm., *P. cooperi* (Baker) Oberm., *P. multiflorus* (Baker) Oberm.

3. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Monocots
- Order: Asparagales
- Family: Asparagaceae Juss.
- Genus: *Asparagus* L.
- Species: *A. africanus* Lam.

Bentham and Hooker (1862)

Kingdom: Plantae
Division: Phanerogamia
Class: Monocotyledones
Series: Coronarieae
Ordo: Liliaceae Juss.
Tribus: Asparageae Dumort.
Genus: *Asparagus* L.
Species: *A. africanus* Lam.

4. Distribution:

Global: Tropical and South Africa, Arabian Peninsula, Socotra, India.

India: Maharashtra

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

6. Threat Status:

IUCN:

BSI:

7. Habit and Habitat: Erect or climbing shrub, with spiny branches. Occurring in clumps in moist sandy savanna. Grows in Tropical Dry Forest.

8. Life Form: Phanerophyte

9. Economic Importance: Used in the indigenous system of medicine for various health ailments. This species also shows aphrodisiac, antiprotozoal, antimalarial, antifertility, antiplantation properties.

10. Probable Progenitor of:

11. DNA

	C- value	Methodology
8	1C (1.16 pg) ⁸	Flow cytometry
	2C (2.33 pg) ⁸	Feulgen cytophotometry ⁷
	4C (30.04 pg) ⁷	

12. Basic chromosome number(s):

13. Zygotic chromosome number(s): $2n = 20$ ⁸
 $2n = 40$ ^{7, 9, 10, 11}

14. Gametic chromosome number(s):

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

Image file

16. Ploidy level: Diploid⁸
Tetraploid^{7, 10, 11}

Image file

17. Agametoploidy

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

19. Genomic formula:

20. Aberrant chromosome number(s) (aneuploidy, aneusomy, polysomy):

21. Somatic chromosomes:

Karyotype Majority metacentric to submetacentric chromosomes¹¹

Chromosome size Very small to small ¹¹

NOR chromosome(s) 4 NOR ⁷; 6 NOR ¹¹

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 level

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