

Species Datasheet

Datasheet No. A-074.002.021
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species

Subspecies

Variety *Asparagus racemosus* var. *javanicus* (Kunth) Baker

Cultivar

Hybrid

Image file

2. Synonyms:

3. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Monocots
- Order: Asparagales
- Family: Asparagaceae Juss.
- Genus: *Asparagus* L.
- Species: *A. racemosus* Willd.
- Variety: *A. racemosus* var. *javanicus* (Kunth) Baker

Bentham and Hooker (1862)

Kingdom: Plantae
Division: Phanerogamia
Class: Monocotyledones
Series: Coronarieae
Ordo: Liliaceae Juss.
Tribus: Asparageae Dumort.
Genus: *Asparagus* L.
Species: *A. racemosus* Willd.
Variety: *A. racemosus* var. *javanicus* (Kunth)
Baker

4. Distribution:

Global: India

India: Maharashtra, Orissa.

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: Phanerophyte

9. Economic Importance: Used in Ayurveda, Unani and Sidha. The dried roots used as drug, diuretic and galactagogue and in the control of ulcer and AIDS.

10. Probable Progenitor of:

11. DNA

C- value

Methodology

12. Basic chromosome number(s):

13. Zygotic chromosome number(s): $2n=20^3$
 $2n=40^{2,3}$

14. Gametic chromosome number(s): $n=20^4$

15. Specialized chromosomes (B chromosomes/ Sex chromosomes/ Polytene chromosomes/ Neocentric chromosomes): B chromosomes (3)²

Image file

16. Ploidy level: Tetraploid⁴

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 submetacentric chromosomes³

Chromosome size Very small to small³

NOR chromosome(s) 2 NOR³; 7 NOR³

Degree of asymmetry Low level of asymmetry³

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 II⁴

Image file

27. Chromosome distribution at anaphase I: Regular⁴

28. Genetic diversity:

Chromosomal level³

Image file

DNA level

29. Any other information (Apoixis; Inversion; Male sterility; Pollen grain mitosis; Pollen stainability; Translocations etc): Pollen stainability- 90%⁴