

Species Datasheet

Datasheet No. A-140.001.037
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species: *Arachis stenosperma* Krapov. & W.C. Greg.

Subspecies

Variety

Cultivar

Hybrid

Image file

2. Synonyms:

3. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Eudicots
- Clade: Rosids
- Order: Fabales
- Family: Fabaceae Lindl.
- Subfamily: Faboideae Rudd
- Genus: *Arachis* L.
- Species: *A. stenosperma* Krapov. & W.C. Greg.

Bentham and Hooker (1862)

Kingdom: Plantae

Division: Phanerogamia

Class: Dicotyledons

Subclass: Polypetalae

Series: Calyciflorae

Cohors: Rosales Bercht. & J. Presl

Ordo: Leguminosae Juss.

Subordo: Papilionaceae Giseke

Genus: *Arachis* L.

Species: *A. stenosperma* Krapov. & W.C. Greg.

4. Distribution:

Global: Brazil

India: Experimental stations

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

6. Threat Status:

IUCN:

BSI:

7. Habit and Habitat: Herbaceous, Tropical regions

8. Life Form: Perennial

9. Economic Importance:

10. Probable Progenitor of:

11. DNA

C-value	Methodology
2C (2.96 pg) ²	Flow cytometry
2C (5.53pg) ¹²	Feulgencytophotodensitometry
2C(6.10 pg) ⁸⁷	Feulgenmicrodensitometry
2C (5.74 pg) ⁸⁸	Feulgencytophotodensitometry

12. Basic chromosome number(s): $x = 10^2, 5, 7, 12, 88, 96$

13. Zygotic chromosome number(s): $2n = 20^2, 5, 6, 7, 14, 18, 23, 26, 27, 28, 87, 88, 96, 97$

14. Gametic chromosome number(s): $n = 10^7, 96$

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

Image file

16. Ploidy level: Diploid^{2, 5, 6, 7, 14, 18, 23, 26, 27, 28, 87, 88, 96, 97}

Image file

17. A gametoploidy:

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

19. Genomic formula: AA^{2, 14, 18, 26, 28, 34, 87, 96, 99}

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

21. Somatic chromosomes: 2, 6, 7, 14, 97, 106

Karyotype Majority metacentric/submetacentric chromosomes

Chromosome size Small

NOR chromosome(s) 2

Degree of asymmetry Symmetrical

Image file

22. Banding pattern(s): C - banding⁶, Heterochromatic DAPI⁺ bands^{2, 106}, Centromeric

DAPI⁺ bands¹⁴

Image file

23. Physical mapping of chromosomes:

In situ hybridization

Image file

Fluorescent in situ hybridization: 18S - 5.8S - 26S and 5S ribosomal gene families^{14,106}

Image file

24. Genomic in situ hybridization:

Image file

25. Linkage map:^{76, 77, 78, 85}

Image file

26. Chromosome associations:

Female meiosis

Male meiosis 10 II, Also IV ^{7, 96}

Image file

27. Chromosome distribution at anaphase I:

28. Genetic diversity:

Chromosomal level

Image file

DNA level^{23,26, 27, 28, 34, 38, 51, 63}

29. Any other information (Apomixis; Inversion; Male sterility; Pollen grain mitosis;

Pollen stainability; Translocations etc.): Pollen stainability: 96 %³⁶, 98 % ⁹⁶