

Species Datasheet

Datasheet No. A-140.001.011
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species: *Arachishelodes* Mart. ex Krapov. & Rigoni

Subspecies

Variety

Cultivar

Hybrid

Image file

2. Synonyms: *Arachis helodes* Mart. ex Benth.

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. helodes* Mart. ex Krapov. & Rigoni

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. helodes* Mart. ex Krapov. & Rigoni

4. Distribution:

Global: Brazil

India: Experimental stations

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

6. Threat Status:

IUCN: Near Threatened

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 (2.81 pg)² Flow cytometry

2C (6.10 pg)⁸⁷ Feulgen microdensitometry

12. Basic chromosome number(s): $x = 10^{2,5}$

13. Zygotic chromosome number(s): $2n = 20^{2,5,7,18,26,27,87,113}$

14. Gametic chromosome number(s):

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

Image file

6. Ploidy level: Diploid^{2,5,7,18,26,27,87,113}

Image file

17. Agametoploidy:

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

19. Genomic formula: $AA^{2,18,26,87}$

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

21. Somatic chromosomes: $2,7,106$

Karyotype Majority metacentric/submetacentric chromosomes

Chromosome size Small

NOR chromosome(s) 2

Degree of asymmetry Symmetrical

Image file

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

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 ¹⁰⁶

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^{26, 27, 38, 51, 63}

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