

Species Datasheet

Datasheet No. A-140.001.041
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species: *Arachiswilliamsii* 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. williamsii* 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. williamsii* Krapov. & W.C. Greg.

4. Distribution:

Global: Bolivia

India: Experimental stations

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

6. Threat Status:

IUCN:

BSI:

7. Habit and Habitat: Herbaceous, Tropical regions

8. Life Form: Annual

9. Economic Importance:

10. Probable Progenitor of:

11. DNA

C-value

Methodology

2C (3.20pg)²

Flow Cytometry

12. Basic chromosome number(s): $x = 10^2, 5, 96, 119$

13. Zygotic chromosome number(s): $2n = 20^2, 5, 19, 22, 96, 116, 119$

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

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

Image file

16. Ploidy level: Diploid^{2, 5, 19, 22, 96, 116, 119}

Image file

17. Agamete ploidy:

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

19. Genomic formula: BB^{2, 19, 22, 96, 100, 119}

20. Aberrant chromosome number(s) (aneuploidy, aneusomaty, polysomaty):

21. Somatic chromosomes: 2, 19, 100, 116, 119

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^{19, 100}

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 ^{19,100}

Image file

24. Genomic in situ hybridization:

Image file

25. Linkage map:

Image file

26. Chromosome associations:

Female meiosis

Male meiosis 10 II⁹⁶

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; Translocation etc.): Pollen stainability: 99.80 %⁹⁶