

Species Datasheet

Datasheet No. A-140.001.036
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species: *Arachissimpsonii*Krapov. & W.C. Gregory

Subspecies

Variety

Cultivar

Hybrid

Image file

2. Synonyms:

3. Systematic Position:

APG IV (2016)

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

Bentham and Hooker (1862)

Kingdom: Plantae
Division: Phanerogamia
Class: Dicotyledons
Subclass: Polypetalae
Series: Calyciflorae
Cohors: RosalesBercht. & J. Presl
Ordo: Leguminosae Juss.
Subordo: Papilionaceae Giseke
Genus: *Arachis* L.
Species: *A. simpsonii* Krapov. & W.C. Gregory

4. Distribution:

Global: Brazil and Bolivia

India: Experimental stations

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

6. Threat Status:

IUCN:

BSI:

7. Habit and Habitat: Herb, Tropical regions

8. Life Form: Perennial

9. Economic Importance:

10. Probable Progenitor of:

11. DNA

C-value **Methodology**

2C (3.08pg)² Flow cytometry

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

13. Zygotic chromosome number(s): $2n = 20^2, 5, 26, 96, 119$

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, 26, 96, 119}

Image file

17. Agameteoploidy:

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

19. Genomic formula: AA^{2, 26, 119}

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

21. Somatic chromosomes^{2, 106, 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^{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 10 II⁹⁶

Image file

27. Chromosome distribution at anaphase I:

28. Genetic diversity:

Chromosomal level

Image file

DNA level^{26, 51, 64}

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

Pollen stainability; Translocation etc.): Pollen stainability: 97.50 % ⁹⁶