

Species Datasheet

Datasheet No. A-140.001.001
(family.genus.species)

DBT- Network Programme

1. Taxon:

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

Bentham and Hooker (1862)

Kingdom: Plantae

Division: Phanerogamia

Class: Dicotyledons

Subclass: Polypetalae

Series: Calyciflorae

Cohors: Rosales

Ordo: Leguminosae Juss.

Subordo: Papilionaceae Giseke

Genus: *Arachis* L.

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

4. Distribution:

Global: South America

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: Biannual or Perennial

9.Economic Importance:

10. Probable Progenitor of: B genome donor of *A. hypogaea*, *A. hypogaeasubsp.fastigiata*,
*A. hypogaeasubsp.hypogaea*⁷, 20, 30, 31, 92, 93, 94, 95

11.DNA

C-value

Methodology

2C (2.83 pg) ²	Flow cytometry
2C (4.92 pg) ¹²	Feulgen cytophotodensitometry
2C (5.33 pg) ⁸⁷	Feulgen microdensitometry
2C (4.97 pg) ⁸⁸	Feulgen cytophotodensitometry

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, 15, 17, 18, 19, 20, 22, 23, 26, 27, 87, 88, 96, 97, 98}

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, 15, 17, 18, 19, 20, 22, 23, 26, 27, 87, 88, 96, 97, 98}

Image file

17. A gametoploidy:

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

19. Genomic formula: BB^{14, 17, 18, 26, 34, 87, 96}, KK^{2, 99, 100}

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

21. Somatic chromosomes: 2, 6, 7, 14, 15, 19, 97, 100

Karyotype Majority metacentric / submetacentric chromosomes

Chromosome size Small

NOR chromosome(s) 2

Degree of asymmetry Symmetrical

Image file

22. Banding pattern(s):C - banding⁶,HeterochromaticDAPI⁺ bands^{2,19,100},

Centromeric DAPI⁺ bands^{14, 17}

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^{14,19,100}

Image file

24.Genomic in situ hybridization:^{17, 99}

Image file

25. Linkage map:

Image file

26.Chromosome associations:

Female meiosis

Male meiosis:10 II^{7,96}

Image file

27.Chromosome distribution at anaphase I:

28. Genetic diversity:

Chromosomal level

Image file

DNA level^{23,26,27,33,34,38,42,51,64}

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

Pollen stainability;Translocationetc.):Pollen stainability:98.10 %⁹⁶, 91 - 94 %³⁶