

Species Datasheet

Datasheet No. A-140.001.017
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species:

Subspecies

Variety: *Arachishypogaeasubsp.fastigiata* var. *fastigiata* Krapov. & W. C. Greg.

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. hypogaea* L.
- Subspecies: *A. hypogaea* subsp. *fastigiata* Waldron.
- Variety: *A. hypogaea* subsp. *fastigiata* var. *fastigiata* 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. hypogaea* L.
Subspecies: *A. hypogaea* subsp. *fastigiata* Waldron.
Variety: *A. hypogaea* subsp. *fastigiata* var. *fastigiata* Krapov. & W. C. Greg.

var. *fastigiata* Krapov. & W. C. Greg.

4. Distribution:

Global: Americas

India: Cultivated

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

6. Threat Status:

IUCN:

BSI:

7. Habit and Habitat: Herbaceous, Tropical regions

8.Life Form:Annual

9.Economic Importance:Major crop for high quality vegetable oil, human food, feedstock, ground cover value

10. Probable Progenitor of:

11.DNA

C-value

Methodology

2C (10.26 - 11.82 pg)⁸⁷

Feulgenmicrodensitometry

2C (11.10pg)¹²

Feulgencytophotodensitometry

2C (10.92pg)⁸⁸

Feulgencytophotodensitometry

12.Basic chromosome number(s): $x = 10^{5-11, 88, 89}$

13. Zygotic chromosome number(s): $2n = 40^{8, 11, 19, 22, 87, 88, 89}$

14. Gametic chromosome number(s):

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

Image file

16.Ploidy level:Tetraploid^{8, 11, 19, 22, 87, 88, 89}

Image file

17.Agametoploidy:

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

19.Genomic formula:AABB²²

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

21.Somatic chromosomes:^{8, 19, 89}

Karyotype Majority metacentric / submetacentric chromosomes

Chromosome sizeSmall

NOR chromosome(s)2

Degree of asymmetrySymmetrical

Image file

22. Banding pattern(s):Heterochromatic DAPI⁺bands ¹⁹

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

Image file

24. Genomic in situ hybridization:²²

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 level⁸

Image file

DNA level^{8,18, 38, 51,57,60 ,90}

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