

Species Datasheet

DBT- Network Programme

Datasheet No. A-140.001.019
(family.genus.species)

1. Taxon:

Species:

Subspecies

Variety: *Arachishypogaeasubsp.fastigiata* var. *vulgaris* C. Harz

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. hypogae*L.
- Subspecies: *A. hypogaea* subsp. *fastigiata* Waldron.
- Variety: *A. hypogaea* subsp. *fastigiata* var. *vulgaris* C. Harz

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. hypogae*L.

Subspecies: *A. hypogaeasubsp.fastigiata* Waldron.

Variety: *A. hypogaea* subsp. *fastigiata* var. *vulgaris*

C. Harz

4. Distribution:

Global: Americas, Africa, China, Europe

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

2C (10.37 - 11.69 pg)⁸⁷

2C (11.33pg)¹²

Methodology

Feulgenmicrodensitometry

Feulgencytophotodensitometry

12.Basic chromosome number(s): $x = 10^{6-12,89}$

13. Zygotic chromosome number(s): $2n = 40^{6, 8, 11, 18, 19, 22, 87, 89}$

14. Gametic chromosome number(s):

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

Image file

16.Ploidy level:Tetraploid^{6, 8, 11, 18, 19, 22, 87, 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:^{6,8,19,89}

KaryotypeMajority metacentric/submetacentric chromosomes

Chromosome sizeSmall

NOR chromosome(s)2

Degree of asymmetrySymmetrical

Image file

22. Banding pattern(s):Heterochromatic DAPI⁺bands¹⁹

Image file

23.Physical mapping of chromosomes:

In situ hybridization

Image file

Fluorescent in situ hybridization: 18S - 5.8S - 26S and 5S ribosomal gene families¹⁹

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^{18, 32,38,51,57,60,90}

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