

Species Datasheet

Datasheet No. A-140.001.023
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species:

Subspecies:

Variety: *Arachishypogaea* subsp. *Hypogaea* var. *hypogaea*

Cultivar:

Hybrid:

Image file:

2. **Synonyms:** *Arachishypogaea* f. *nambyquarae* (Hoehne) F. J. Herm. , *Arachishypogaea* var. *nambyquarae* (Hoehne) Burkart, *Arachisnambyquarae* Hoehne

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: *Arachishypogaea* subsp. *hypogaea*
- Subspecies: *A. hypogaea* subsp. *hypogaea* var. *hypogaea*
- Variety: *Arachishypogaea* subsp. *hypogaea* var. *hypogaea*

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. *hypogaea*
Variety: *Arachishypogaea* subsp. *hypogaea* var. *hypogaea*

4. Distribution:

Global: Americas, Europe

India: Gujarat, Punjab, Uttar Pradesh

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 (10.36pg)¹²

Feulgencytophotodensitometry

2C (10.87pg)⁸⁸

Feulgencytophotodensitometry

2C(10.51-11.76pg)⁸⁷ Feulgen microdensitometry

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

13. Zygotic chromosome number(s): $2n = 40^{6,8,11,19,22,87,88,89}$

14. Gametic chromosome number(s):

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

Image file

16.Ploidy level:Tetraploid^{6,8,11,19,22,87,88,89}

Image file

17.Agametoploidy:

18.Nature of polyploidy (auto, segmental, allo, autoallo):Allotetraploid²²

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):HeterochromaticDAPI⁺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 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^{32,38,51,57,60,90}

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