Species Datasheet

Datasheet No. A-140.001.020 **DBT- Network Programme**
(family.genus.species)

1. Taxon:

Species
Subspecies: *Arachis hypogaea* subsp. *hypogaea*
Variety
Cultivar
Hybrid

Image file

2. Synonyms:

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. hypogaea* L.
Subspecies: *A. hypogaea* subsp. *hypogaea*

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. hypogaea* L.
- Subspecies: *A. hypogaea* subsp. *hypogaea*

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 region

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 (11.27 pg)[87]	Feulgenmicrodensitometry

12.Basic chromosome number(s):x= 10 [7]

13. Zygotic chromosome number(s):2n = 40 [7,19,22,27,87]

14. Gametic chromosome number(s):n= 20 [7]

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

Image file

16.Ploidy level: Tetraploid[7,19,22,27,87]

Image file

17.Agametoploidy:

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

19.Genomic formula:AABB [87]

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

21.Somatic chromosomes:[7 , 19]

Karyotype Majoritymetacentric/submetacentricchromosomes

Chromosome size Small

NOR chromosome(s)2

Degree of asymmetry Symmetrical

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 meiosis20 II, Also III and IV [7]

Image file

27.Chromosome distribution at anaphase I:

28. Genetic diversity:

Chromosomal level

Image file

DNA level[27 ,32,51,57]

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