Species Datasheet

Datasheet No. A-140.001.018
(family.genus.species)

DBT- Network Programme

1.Taxon:

Species:
Subspecies
Variety *Arachishypogaea*subsp. *fastigiata*var. *peruviana*Krapov.& W.C. Gregory
Cultivar
Hybrid

Image file

2. Synonyms:*Arachishypogaea*subsp.*hypogaea*var.*peruviana*

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. *fastigiata* Waldron.
- Variety : *A. hypogaea* subsp. *fastigiata*var. *peruviana*Krapov. & W.C. Gregory

Bentham and Hooker(1862)
Kingdom: Plantae
Division:Phanerogamia
Class: Dicotyledons
subclass:Polypetalae
Series: Calyciflorae
Cohors: Rosales Bercht. & J. Presl
Ordo: Leguminosae Juss.
Subordo:PapilionaceaeGiseke
Genus: *Arachis*L.
Species: *A.hypogaea*L.
Subspecies: *A. hypogaea* subsp. *fastigiata*Waldron.
Variety : *A. hypogaea* subsp. *fastigiata*var. *peruviana*Krapov.& W.C. Gregory

4.Distribution:

Global: Americas, Indonesia, China up toMadagascar

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**

12.Basic chromosome number(s):x = 10 [5 - 11 ,89]

13. Zygotic chromosome number(s):2n = 40 [11,18,19,22,89]

14. Gametic chromosome number(s):

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

Image file

16.Ploidy level: Tetraploid[11 ,18,19, 22,89]

Image file

17.Agametoploidy:

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

19.Genomic formula:AABB[22]

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

21.Somatic chromosomes:[19, 89]

Karyotype Majority metacentric / submetacentric chromosomes

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 meiosis

Image file

27.Chromosome distribution at anaphase I:

28. Genetic diversity:

Chromosomal level

Image file

DNA level[32 ,51 ,57, 60, 90]

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