

Species Datasheet

Datasheet No A-140.001.007
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species: *Arachisdiogoi*Hoehne

Subspecies

Variety

Cultivar

Hybrid

Image file

2. Synonyms: *Arachischacoense* Krap.et Greg., *Arachisvillosa* subsp. *diogoi* (Hoehne) A. Chev.

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. diogoi*Hoehne

Bentham and Hooker (1862)

Kingdom: Plantae
Division: Phanerogamia
Class: Dicotyledons
Subclass: Polypetalae
Series: Calyciflorae
Cohors: RosalesBercht. & J. Presl
Ordo: Leguminosae Juss.
Subordo: PapilionaceaeGiseke
Genus: *Arachis*L.
Species: *A. diogoi*Hoehne

4. Distribution:

Global: Americas

India: Experimental stations

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

6. Threat Status:

IUCN:

BSI:

7. Habit and Habitat: Herbaceous, Tropical regions

8. Life Form: Perennial

9. Economic Importance:

10. Probable Progenitor of:

11. DNA

C-value Methodology

2C (2.84 pg)² Flow cytometry

2C (5.94 pg)¹² Feulgen cytophotodensitometry

2C (6.37 pg)⁸⁷ Feulgen microdensitometry

12. Basic chromosome number(s): $x = 10^{2,5,7,12}$

13. Zygotic chromosome number(s): $2n = 20^{5,7,15,18,27,87,97,112,113}$

14. Gametic chromosome number(s): $n = 10^{7,112}$

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

Image file

16. Ploidy level: Diploid ^{5,7,15,18,27,87,97,112,113}

Image file

17. Agamete ploidy:

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

19. Genomic formula: AA^{2,18,87}

20. Aberrant chromosome number(s) (aneuploidy, aneusomy, polysomy):

21. Somatic chromosomes: ^{2,7,15,97,106}

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^{2,106}

Image file

23. Physical mapping of chromosomes:

In situ hybridization

Image file

Fluorescent in situ hybridization: 18S - 5.8S - 26S and 5S ribosomal gene families¹⁰⁶

Image file

24. Genomic in situ hybridization:

Image file

25. Linkage map:

Image file

26. Chromosome associations:

Female meiosis

Male meiosis^{10 II 7, 112}

Image file

27. Chromosome distribution at anaphase I:

28. Genetic diversity:

Chromosomal level

Image file

DNA level^{23,27,32,38,51,63}

29. Any other information (Apomixis; Inversion; Male sterility; Pollen grain mitosis;

Pollen stainability; Translocation etc.): Pollen stainability: 90 %³⁶, 99 %¹¹²