

# Species Datasheet

Datasheet No. A-140.001.026  
(family.genus.species)

DBT- Network Programme

## 1. Taxon:

Species: *Arachis kempff-mercadoi* Krapov. & W.C. Greg.

Subspecies

Variety

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: *Arachis kempff-mercadoi* Krapov. & W.C. Greg.

### 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: *Arachis kempff-mercadoi* Krapov. & W.C. Greg.

## 4. Distribution:

**Global:** Bolivia

**India:** Experimental stations

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

## 6. Threat Status:

**IUCN:**

**BSI:**

**7. Habit and Habitat:** Herb, Tropical regions

**8. Life Form:** Perennial

**9. Economic Importance:**

**10. Probable Progenitor of:**

## 11. DNA

### C-value Methodology

2C (2.69pg)<sup>2</sup> Flow cytometry

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

13. Zygotic chromosome number(s):  $2n = 20^{2, 5, 26, 112}$

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

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

Image file

16. Ploidy level: Diploid<sup>2, 5, 26, 112</sup>

Image file

17. Agamete ploidy:

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

19. Genomic formula:  $AA^{2, 26, 34, 51}$

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

21. Somatic chromosomes: <sup>2, 106</sup>

Karyotype Majority metacentric/submetacentric chromosomes

Chromosome size Small

NOR chromosome(s) 2

Degree of asymmetry Symmetrical

Image file

22. Banding pattern(s): Heterochromatic DAPI<sup>+</sup> bands<sup>2, 106</sup>

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<sup>106</sup>

Image file

**24. Genomic in situ hybridization:**

Image file

**25. Linkage map:**

Image file

**26. Chromosome associations:**

**Female meiosis**

**Male meiosis** 10 II <sup>112</sup>

Image file

**27. Chromosome distribution at anaphase I:**

**28. Genetic diversity:**

**Chromosomal level**

Image file

**DNA level**<sup>26, 34, 46, 51</sup>

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

**Pollen stainability; Translocation etc.):** Pollen stainability: 84 %<sup>36</sup>, 100 %<sup>112</sup>