

# Species Datasheet

Datasheet No. A-140.001.032  
(family.genus.species)

DBT- Network Programme

## 1. Taxon:

Species: *Arachis monticola* Krapov. & Rigoni

Subspecies

Variety

Cultivar

Hybrid

Image file

2. Synonyms: *Arachis pusilla* Benth.

## 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. monticola* Krapov. & Rigoni

### 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. monticola* Krapov. & Rigoni

## 4. Distribution:

Global: Argentina

India: Experimental stations

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

## 6. Threat Status:

IUCN:

BSI:

7. Habit and Habitat: Herbaceous, Tropical regions

8. Life Form: Annual

**9. Economic Importance:**

**10. Probable Progenitor of:** Tetraploid progenitor of *A. hypogaea*<sup>17,22,30,39,91</sup>

**11. DNA**

<b>C-value</b>	<b>Methodology</b>
2C(5.70 pg) <sup>2</sup>	Flow cytometry
2C (5.98 pg) <sup>4</sup>	Flow cytometry and Feulgen densitometry
2C (10.39pg) <sup>12</sup>	Feulgencytophotodensitometry
2C (11.28 - 11.34 pg) <sup>87</sup>	Feulgenmicrodensitometry

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

**13. Zygotic chromosome number(s):**  $2n = 40^{2,5,6,7,14,17,18,19,22,23,87}$

**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<sup>2,5,6,7,14,17,18,19,22,23,87</sup>

Image file

**17. Agamete ploidy:**

**18. Nature of polyploidy (auto, segmental, allo, autoallo):** Allotetraploid<sup>17,19,30</sup>

**19. Genomic formula:** AABB<sup>2,14,17,18,19,26,34,87</sup>

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

**21. Somatic chromosomes:** <sup>7,8,14,19</sup>

**Karyotype** Majority metacentric / submetacentric chromosomes

**Chromosome size** Small

**NOR chromosome(s)** 4

**Degree of asymmetry** Symmetrical

Image file

**22. Banding pattern(s):** C-banding<sup>6</sup>, DAPI<sup>+</sup> bands<sup>2,14,17,19</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>14,19</sup>

Image file

### **24. Genomic in situ hybridization:**<sup>17,22</sup>

Image file

### **25. Linkage map:**

Image file

### **26. Chromosome associations:**

#### **Female meiosis**

**Male meiosis** 20 II, Also III and IV<sup>7</sup>

Image file

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

### **28. Genetic diversity:**

#### **Chromosomal level**

Image file

**DNA level**<sup>23,26,27,32,33,34,38,44,51,57,63,64</sup>

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