

# Species Datasheet

## DBT- Network Programme

Datasheet No. A-140.047.049  
(family.genus.species)

### 1. Taxon:

Species *Crotalaria incana*L.  
Subspecies  
Variety  
Cultivar  
Hybrid

Image file

### 2. Synonyms:

- *Chrysocalyxschimperi*A.Rich.
- *Crotalaria affinis*DC.
- *Crotalaria eriocaula*S. Schauer
- *Crotalaria cubensis*DC.
- *Crotalaria cytisifolia*Steud.
- *Crotalaria diffusa*Vell.
- *Crotalaria eriocaula*S.Schauer
- *Crotalaria herbacea*Schrank
- *Crotalaria hirta* Lag.
- *Crotalaria hirta*Roth
- *Crotalaria incana*f. *glabrescens* R. Wilczek
- *Crotalaria incana*subsp. *incana*
- *Crotalaria incana*var. *incana*
- *Crotalaria incana* f. *microphylla*Chodat&Hassl
- *Crotalaria montana*A.Rich.
- *Crotalaria picensis*Phil.
- *Crotalaria pubescens*Moench
- *Crotalaria pubescens hort.* ex Steud.
- *Crotalaria radiata* Merr.
- *Crotalaria schimperi*A.Rich.
- *Crotalaria setifera*DC.
- *Lupinus rotundifolius*Sesse&Moc.

### 3. Systematic Position:

- APG IV (2016)**
- Kingdom: Plantae
  - Clade: Angiosperms
  - Clade: Eudicots
  - Clade: Superrosids
  - Clade: Rosids
  - Clade: Fabids
  - Order: Fabales Bromhead
  - Family: Fabaceae Lindl.
  - Subfamily: Faboideae Rudd
  - Genus: *Crotalaria* L.
  - Species: *C. incana*L.

**Bentham and Hooker (1862)**

Kingdom: Plantae  
Division: Phanerogamia  
Class: Dicotyledons  
Subclass: Polypetalae  
Series: Calyciflorae  
Cohors: Rosales Bercht. & J. Presl  
Ordo: LeguminosaeJuss.  
Subordo: PapilionaceaeGiseke  
Genus: *Crotalaria* L.  
Species: *C. incana*L.

### 4. Distribution:

**Global:** Southern-Eastern Asia,Africa,Americas, Antarctica, Australia, Netherlands.

**India**

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

**6.Threat Status:**

**IUCN**

**BSI**

**7.Habit and Habitat:**Erect, Herb.

**8.Life Form:**Perennial

**9.Economic Importance:**

**10. Probable Progenitor of:**

**11.DNA**

**C-valueMethodology**

2C DNA = 3.43pgFeulgen Microdensitometer<sup>11</sup>

4C DNA= 6.86pg Feulgen Microdensitometer<sup>11</sup>

**12.Basic chromosome number(s):** $x=7^{42, 44, 45}$

**13. Zygotic chromosome number(s):** $2n=14^1, 2, 11, 13-16,36,37,41-46, 47, 49, 52, 53$

$$2n=16^{29}$$

**14. Gametic chromosome number(s):** $n=7^2,13, 34, 37, 42-48, 50, 51, 52$

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

**16.Ploidy level:**Diploid<sup>2, 11, 13, 14, 15,36, 37, 42-47, 52</sup>

Image file

**17.Agametoploidy:**

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

**19.Genomic formula:**

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

**21. Somatic chromosomes:** 13, 14, 15, 37, 43, 44, 45, 47, 52

**Karyotype:** Majority Metacentric and Submetacentric chromosomes

**Chromosome size:** Small-Medium

**NOR chromosome(s):** 2-4

**Degree of asymmetry:** Symmetrical

Image file

**22. Banding pattern(s):** DAPI, CMA, CMA/DA<sup>42</sup>

Image file

**23. Physical mapping of chromosomes:**

**In situ hybridization**

Image file

**Fluorescent in situ hybridization:** 45S and 5S rDNA gene families<sup>42</sup>

Image file

**24. Genomic in situ hybridization:**

Image file

**25. Linkage map:**

Image file

**26. Chromosome associations:** 7II<sup>2</sup>, 13, 15, 43, 45, Univalent<sup>16, 52</sup>, Trivalent<sup>16, 52</sup>, Quadrivalent<sup>16, 52</sup>.

**Female meiosis**

**Male meiosis**

Image file

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

**28. Genetic diversity:**

**Chromosomal level:** 37, 44, 45

**DNA level**

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

Reciprocal translocation:<sup>34</sup>

Pollen stainability: 75-100%<sup>2</sup>