

Species Datasheet

Datasheet No. A-140.078.005
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species: *Cajanuscajanifolius* (Haines) Maesen
Subspecies
Variety
Cultivar
Hybrid

Image file

2. Synonyms: *Atylosiacajanifolia* Haines
Cantharospermumcajanifolium (Haines) Raizada

3. Systematic Position: APG IV; Bentham and Hooker:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Eudicots
- Clade: Rosids
- Order: FabalesBromhead
- Family: FabaceaeLindl.
- Subfamily: Faboideae Rudd
- Genus: *Cajanus*DC
- Species: *Cajanuscajanifolius*
(Haines) Maesen

Bentham and Hooker (1862)

Kingdom: Plantae
Division: Phanerogamia
Class: Dicotyledons
Subclass: Polypetalae
Series: Calyciflorae
Cohors: Rosales Bercht. & J. Presl
Ordo: LeguminosaeJuss.
Subordo: PapilionaceaeGiseke
Genus: *Cajanus* DC
Species: *Cajanuscajanifolius* (Haines) Maesen

4. Distribution:

Global

India

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

6. Threat Status:

IUCN

BSI

7. Habit and Habitat:

8.Life Form:

9.Economic Importance:

10. Probable Progenitor of: Pigeonpea (Cajanus)^{15, 33, 44, 52, 61, 68, 74, 81, 90, 91, 92, 93, 94, 95, 96}

It also forms the secondary gene pool.

11.DNA

C-value Methodology

4C – (6.93 ± 0.06) pg Feulgen Microdensitometry¹

12.Basic chromosome number(s):

13. Zygotic chromosome number(s): $2n = 22$ ^{19, 97, 98}

14. Gametic chromosome number(s): $n = 11$ ¹⁹

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

16.Ploidy level:

17.Agametoploidy:

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

19.Genomic formula:

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

21.Somatic chromosomes:¹

Karyotype: Majorly Sub Metacentric

Chromosome size: Small

NOR chromosome(s): 4

Degree of asymmetry: Symmetrical

22. Banding pattern(s):

23.Physical mapping of chromosomes:

In situ hybridization

Image file

Fluorescent in situ hybridization

Image file

24.Genomic in situ hybridization:

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^{1, 56,61}

DNA level: SSR, SNP, EST, RFLP, RAPD^{6,33, 39, 57, 61, 68, 72, 74, 76}

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