Species Datasheet

Datasheet No. A-140.047.010 **DBT- Network Programme**
(family.genus.species)

1.Taxon:

Species *Crotalaria assamica*Benth.
Subspecies
Variety
Cultivar
Hybrid

Image file

2. Synonyms:

- *Crotalaria burmannii*DC.
- *Crotalaria sericea*Burm. f.

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. assamica*Benth.

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. assamica*Benth.

4.Distribution:

Global: Antarctica, Southern-Eastern Asia, United States**.**

India

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

6.Threat Status:

IUCN

BSI

7.Habit and Habitat: Non-climbing, shrub.This species occurs in a range of moist habitats from riverine scrub and grassland to evergreen forest on high mountains. It is also found in disturbed habitats such as roadside verges and abandoned fields. It is found on a range of soils, volcanic, clay and ultra-basic

8.Life Form: Perennial

9.Economic Importance: It is used as a soil fertilizer and a root extract is also used to treat bladder stones

10. Probable Progenitor of:

11.DNA

C-value	**Methodology**
4C= 3.89 pg	Feulgen Photometry[11]
2C= 1.95 pg	Feulgen Photometry[11]

12.Basic chromosome number(s):

13. Zygotic chromosome number(s):2n=16[2, 9, 11, 12, 13, 14, 15]

14. Gametic chromosome number(s):n= 8[2, 14, 16, 17]

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

Image file

16.Ploidy level: Diploid [11, 15]

Image file

17.Agametoploidy:

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

19.Genomic formula:

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

21.Somatic chromosomes:[13, 14, 15]

Karyotype: Majorly Submetacentric

Chromosome size: Small

NOR chromosome(s): 4

Degree of asymmetry: Symmetrical

Image file

22. Banding pattern(s):

Image file

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:8II[2], 2-4 I[16], 1 IV+6 II[17]

Female meiosis

Male meiosis

Image file

27.Chromosome distribution at anaphase I:

28. Genetic diversity:

Chromosomal level

DNA level

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

Pollen stainability- 60%[2]