

Species Datasheet
DBT- Network Programme

Datasheet No. A-140.047.043
(family.genus.species)

1.Taxon:

Species *Crotalaria grahamiana* Wight & Arn.
Subspecies
Variety
Cultivar
Hybrid

Image file

2. Synonyms:

3.Systematic Position:

- | APG IV (2016) | Bentham and Hooker (1862) |
|--|--|
| • Kingdom: Plantae | Kingdom: Plantae |
| • Clade: Angiosperms | Division: Phanerogamia |
| • Clade: Eudicots | Class: Dicotyledons |
| • Clade: Superrosids | Subclass: Polypetalae |
| • Clade: Rosids | Series: Calyciflorae |
| • Clade: Fabids | Cohors: Rosales Bercht. & J. Presl |
| • Order: Fabales Bromhead | Ordo: Leguminosae Juss. |
| • Family: Fabaceae Lindl. | Subordo: Papilionaceae Giseke |
| • Subfamily: Faboideae Rudd | Genus: <i>Crotalaria</i> L. |
| • Genus: <i>Crotalaria</i> L. | Species: <i>C. grahamiana</i> Wight & Arn. |
| • Species: <i>C. grahamiana</i> Wight & Arn. | |

4.Distribution:

Global: Antarctica, Australia, Chile, India, Madagascar

India

5.Indigenous/Exotic/Endemic;Cultivated/Wild:Endemic to Southern Western Ghats

6.Threat Status:

IUCN

BSI

7.Habit and Habitat:Shrub, Habitat: Grasslands and montane scrub jungles.

8.Life Form:Perennial

9.Economic Importance:

10. Probable Progenitor of:

11. DNA

C-value Methodology

2C DNA= 1.91pg

Feulgen Microdensitometer¹¹

4C DNA= 3.82pg

Feulgen Microdensitometer¹¹

12. Basic chromosome number(s): $x=8^{34}$

13. Zygotic chromosome number(s): $2n=16^{2,13, 15, 29, 34, 39}$

14. Gametic chromosome number(s): $n=8^{2,13}$

15. Specialized chromosomes (B chromosomes/Sex chromosomes/Polytene chromosomes/Neocentric chromosomes): 1-2B Chromosome²

Image file

16. Ploidy level: Diploid^{2,13, 15}

Image file

17. Agamete ploidy:

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

19. Genomic formula:

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

21. Somatic chromosomes: $13, 15, 34$

Karyotype: Majority Submetacentric Chromosome

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: $8n^{2, 15}$

Female meiosis

Male meiosis²

Image file

27. Chromosome distribution at anaphase I: $8:8^2$

28. Genetic diversity:

Chromosomal level

DNA level

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