

Species Datasheet

Datasheet No. A-140.047.112
(family.genus.species)

DBT- Networ

1. Taxon:

Species *Crotalaria retusa*L.
Subspecies
Variety
Cultivar
Hybrid

Image file

2. Synonyms:

- *Crotalaria cuneifolia*(Forssk.) "Schrank, p.p.A"
- *Crotalaria cuneifolia*Raf.
- *Crotalaria hostmannii*Steud.
- *Crotalaria retusavar.maritima*Trimen
- *Crotalaria retusavar.retusa*
- *Crotalaria retusifolia*Stokes
- *Dolichoscuneifolius*Forssk.
- *Lupinuscochinchinensis*Lour.

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: LeguminosaeJuss. |
| • Family: Fabaceae Lindl. | Subordo: PapilionaceaeGiseke |
| • Subfamily: Faboideae Rudd | Genus: <i>Crotalaria</i> L. |
| • Genus: <i>Crotalaria</i> L. | Species: <i>C. retusa</i> L. |
| • Species: <i>C. retusa</i> L. | |

4. Distribution:

Global: Antarctica, Americas, Australia, Africa, Cameroon, China, India, Indonesia, Netherlands, Southern Eastern Asia, Turkey.

India

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

6. Threat Status:

IUCN

BSI

7. Habit and Habitat: Non-climbing, Undershrub. Habitat: "All vegetation types, also in the plains"

8. Life Form: Annual and Perennial

9. Economic Importance:

10. Probable Progenitor of:

11. DNA

C-value

2C DNA = 1.95pg

4C DNA = 3.91pg

Methodology

Feulgen Microdensitometer¹¹

Feulgen Microdensitometer¹¹

12. Basic chromosome number(s): $x=8$ ⁴²

13. Zygotic chromosome number(s): $2n=16$ ^{1,5,8,11,13,15,16,26,29,42,43,46,47,62,73,79,96,97,101,102,103}

$2n=14$ ⁵⁹

14. Gametic chromosome number(s): $n=8$ ^{5,8,13, 17, 23, 27, 46, 73, 84, 98-100}

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

B Chromosome: 0-2^{15, 18}

Polytene chromosomes:¹⁰⁴

Image file

16. Ploidy level: Diploid^{1, 8,11, 13, 15, 42, 43, 47, 84}

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: ^{1,8, 13, 15, 43, 47}

Karyotype: Majority Metacentric and Submetacentric chromosome

Chromosome size: Small, Medium, Large

NOR chromosome(s): 2

Degree of asymmetry: Symmetrical

Image file

22. Banding pattern(s): DAPI, CMA, CMA/DA⁴²

Image file

23. Physical mapping of chromosomes:

In situ hybridization

Image file

Fluorescent in situ hybridization: 45S and 5S rDNA gene families⁴²

Image file

24. Genomic in situ hybridization:

Image file

25. Linkage map:

Image file

26. Chromosome associations: 8II⁷³

Female meiosis

Male meiosis⁷³

Image file

27. Chromosome distribution at anaphase I: 8:8^{23,43,47}, 9:7²³

28. Genetic diversity:

Chromosomal level

DNA level^{69, 70}

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

Pollen stainability: 80%²³

Paracentric Inversion: ⁹⁷