

Species Datasheet

Datasheet No. A-140.085.039
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species
Subspecies: *Vicia sativa* L. subsp. *sativa*
Variety
Cultivar
Hybrid

Image file

2. **Synonyms:** *Vicia alba* Moench, *Viciacommunis* Rouy, *Vicia leucosperma* Moench, *Vicia sativa* var. *leucosperma* (Moench) Ser., *Vicia sativa* var. *linearis* Lange, *Vicia sativa* var. *obovata* Ser.

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

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Eudicots
- Clade: Rosids
- Order: Fabales
- Family: Fabaceae
- Subfamily: Faboideae
- Genus: *Vicia* L.
- Species: *Vicia sativa* L.

Bentham and Hooker (1862)

Kingdom: Plantae
Division: Phanerogamia
Class: Dicotyledons
Subclass: Polypetalae
Series: Calyciflorae
Cohors: Rosales Bercht. & J. Presl
Ordo: Leguminosae Juss.
Subordo: Papilionaceae Giseke
Genus: *Vicia* L.
Species: *Vicia sativa* L.

4. Distribution:

Global

India Experimental stations

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

6.Threat Status:

IUCN

BSI

7.Habit and Habitat:Herbaceous. Climber

8.Life Form:Annual

9.Economic Importance:Fodder. Soil improver

10. Probable Progenitor of:Close relative of common vetch, *V.sativa*^{123,124,126,130,131,136,149}

11.DNA

C-value	Methodology
2C (4.50 pg) ²⁹	Microdensitometer
4C (6.71 pg) ⁴	Microdensitometer

12.Basic chromosome number(s): $x=6$ ^{120, 129}

13. Zygotic chromosome number(s): $2n=12$ ^{4, 103, 120, 122, 129, 130}

14. Gametic chromosome number(s): $n=6$ ¹²²

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

Image file

16.Ploidy level:Diploid^{4,103,120,122,129,130}

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:^{4, 29,103,122, 129}

Karyotype Majority metacentric / subtelocentric chromosomes

Chromosome size Medium

NOR chromosome(s) 2

Degree of asymmetry Asymmetrical

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:

Female meiosis

Male meiosis 6II¹²²

Image file

27. Chromosome distribution at anaphase I:

28. Genetic diversity:

Chromosomal level¹⁰³

Image file

DNA level^{29,44,131,132,133}

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