

Species Datasheet

Datasheet No. A-140.085.006
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species: *Viciacordata* Wulfen ex Hoppe
Subspecies
Variety
Cultivar
Hybrid

Image file

2. Synonyms: *Vicia sativa* subsp. *cordata* (Wulfen ex Hoppe) Asch. & Graebn., *Vicia sativa* var. *cordata* Arcang.

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

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: *Viciacordata* Wulfen ex Hoppe

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Eudicots
- Clade: Rosids
- Order: Fabales Bromhead
- Family: Fabaceae Lindl.
- Subfamily: Faboideae Rudd
- Genus: *Vicia* L.
- Species: *Viciacordata* Wulfen ex Hoppe

4. Distribution:

Global Asia, Africa, Europe

India Experimental stations

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

6. Threat Status:

IUCN

BSI

7. Habit and Habitat: Herbaceous, Scrambling climber

8. Life Form: Annual

9. Economic Importance: Fodder

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

11. DNA

C-value	Methodology
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2C (3.95 pg) ^{90,91,92}	Microdensitometer
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12. Basic chromosome number(s): $x=5$ ^{5, 90}

13. Zygotic chromosome number(s): $2n=10$ ^{5,9,90,92,103,104,109,122,130} ; $2n=12$ ¹²²

14. Gametic chromosome number(s): $n=5, 6$ ¹²²

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

Image file

16. Ploidy level: Diploid^{5,9,90,92,103,104,109,122,130}

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: 5,9,29,103,104,109,122

Karyotype Majority submetacentric /metacentric chromosomes

Chromosome size Small

NOR chromosome(s)2

Degree of asymmetrySymmetrical

Image file

22. Banding pattern(s):

Image file

23. Physical mapping of chromosomes:18S - 5.8S - 26S and 5S ribosomal gene families ¹⁰⁹

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 meiosis5II, 6II¹²²

Image file

27. Chromosome distribution at anaphase I:

28. Genetic diversity:

Chromosomal level¹⁰³

Image file

DNA level^{29, 44, 128, 131}

29. Any other information (Apomixis; Inversion; Male sterility; Pollen grain mitosis;

Pollen stainability; Translocation etc.):Pollen stainability:76 - 98 %¹²²