

Species Datasheet

Datasheet No. A-140.085.038
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species
Subspecies: *Vicia sativa* L. subsp. *nigra* (L.) Ehrh
Variety
Cultivar
Hybrid
Image file

2. Synonyms: *Vicianigra*, *Viciaangustifolia* L., *Viciaangustifolia* var. *segetalis* (Thuill.) W. D. J. Koch, *Viciacuneata* Guss, *Viciaheterophylla* C. Presl, *Vicianigra* (L.) Dubois, *Viciapilosa* M. Bieb, *Vicia sativa* subsp. *cuneata* (Guss.) Maire, *Vicia sativa* subsp. *segetalis* (Thuill.) Celak, *Vicia sativa* subsp. *terana* (Losa) Benedi & Molero, *Vicia sativa* var. *angustifolia* L., *Vicia sativa* var. *nigra* L., *Vicia segetalis* Thuill., *Viciaterana* Losa.

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: *Vicia sativa* L.

APG IV (2016)

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

4. Distribution:

Global Asia, Africa, Europe
India

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

6. Threat Status:

IUCN

BSI

7.Habit and Habitat:Herbaceous. Twining or scrambling .Height ~ 20 cm.

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 (4.75 pg)⁹²

Microdensitometer

12.Basic chromosome number(s): $x = 5^5$, $x=6^{5, 92, 120, 129}$

13. Zygotic chromosome number(s): $2n = 10^{5, 109}$, $2n = 12^{9, 115, 117, 120, 129, 130, 134}$

14. Gametic chromosome number(s):

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

Image file

16.Ploidy level:Diploid^{5, 9, 109, 115, 117, 120, 129, 130, 134}

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, 109, 117, 129, 134}

Karyotype Majoritysubmetacentric / metacentric chromosomes

Chromosome sizeMedium

NOR chromosome(s)2

Degree of asymmetrySymmetrical

Image file

22. Banding pattern(s):C - banding¹³⁴

Image file

23. Physical mapping of chromosomes:18S - 5.8S - 26S and 5S ribosomal gene families¹⁰⁹

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

Image file

27. Chromosome distribution at anaphase I:

28. Genetic diversity:

Chromosomal level

Image file

DNA level^{29, 44, 131}

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