

Species Datasheet

Datasheet No. A-140.085.018
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species: *Viciajohannis* Tamam
Subspecies
Variety
Cultivar
Hybrid

Image file

2. Synonyms:

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: *Viciajohannis* Tamam

APG IV (2016)

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

4. Distribution:

Global Africa, Asia, Europe, Middle East

India Experimental stations

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

6. Threat Status:

IUCN

BSI

7. Habit and Habitat: Herbaceous, Erect

8. Life Form: Annual

9. Economic Importance:

10. Probable Progenitor of: *Vicia faba*^{94,95, 96,110}

11. DNA

C-value	Methodology
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2C(14.14 pg) ^{92,112}	Microdensitometer
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4C (25.08 pg) ^{3, 113}	Microdensitometer
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12. Basic chromosome number(s): $x=7^{29}$

13. Zygotic chromosome number(s): $2n=14^{3, 7,8,9,10,19,29,92,111,114}$

14. Gametic chromosome number(s): $n=7^7$

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

Image file

16. Ploidy level: Diploid^{3,7, 8,9,10,19,29,92,111,114}

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: ^{7,9,19,29}

Karyotype Majority submetacentric /metacentric chromosomes

Chromosome size

NOR chromosome(s) 2

Degree of asymmetry Symmetrical

Image file

22. Banding pattern(s):C-banding¹⁹

Image file

23. Physical mapping of chromosomes:18S - 5.8S - 26S and 5S ribosomal gene families¹⁰;

Satellite DNA ¹¹⁴

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 meiosis⁷

Male meiosis Mostly bivalents, 4 I in 40 % cases⁷

Image file

27. Chromosome distribution at anaphase I:

28. Genetic diversity:

Chromosomal level

Image file

DNA level^{29,45,46,49,50,61}

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