

Final Species Datasheet JamU+CalU+SUK-Phase I

Datasheet No. A-416.016.001
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species: *Coriandrum sativum* L.

Subspecies

Variety

Cultivar

Hybrid

Image file

2. Synonyms: *Coriandrum sativum* var. *afghanicum* Stolet., *C. sativum* var. *africanum* Stolet., *C. sativum* var. *anatolicum* Stolet., *C. sativum* var. *arabicum* Stolet., *C. sativum* subsp. *asiaticum* Stolet., *C. sativum* var. *asiaticum* Stolet., *C. sativum* subsp. *indicum* Stolet., *C. sativum* var. *indicum* Stolet., *C. sativum* var. *microcarpum* DC., *C. sativum* var. *pygmaeum* Stolet., *C. sativum* subsp. *vavilovii* Stolet., *C. sativum* var. *vavilovii* Stolet.

3. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Eudicot
- Clade: Asterids
- Clade: Campanulids
- Order: Apiales Nakai
- Family: Apiaceae Lindl.
- Genus: *Coriandrum* L.
- Species: *C. sativum* L.

Bentham and Hooker (1862)

- Kingdom: Plantae
- Division: Phanerogamia
- Class: Dicotyledons
- Subclass: Polypetalae
- Series: Calyciflorae
- Cohors: Umbellales
- Ordo: Umbelliferae Juss.
- Genus: *Coriandrum* L.
- Species: *C. sativum* L.

4. Distribution:

Global: Afghanistan, India, Iran, Lebanon-Syria, Pakistan, Palestine, Saudi Arabia, Sinai, Transcaucasus, Turkey, Algeria, Amur, Angola, Argentina Northeast, Argentina Northwest, Argentina South, Austria, Azores, Baltic States, Bangladesh, Belarus, Belgium, Brazil South, Cambodia, Cameroon, Canary Island, Cape Provinces, Cape Verde, Central European Rus, Chad, Cuba, Czechoslovakia, Dominican Republic, Ecuador, Egypt, El Salvador, Eritrea, Ethiopia, Fiji, France, Free State, Germany, Great Britain, Greece, Guatemala, Haiti, Hungary, Illinois, India, Italy, Juan Fernández Island, Kazakhstan, Kenya, Khabarovsk, Korea, Kriti, Krym, KwaZulu-Natal, Laos, Libya, Madeira, Mauritius, Mexico, Morocco, Mozambique, New Zealand, Norfolk Island, Northern Provinces, Paraguay, Peru, Poland, Portugal, Primorye, Puerto Rico, Rodrigues, Romania, Réunion, Sicília, Somalia, South European Russi, Spain, Sri Lanka, Sudan, Switzerland, Tadjikistan, Tanzania,

Trinidad-Tobago, Tunisia, Turkey-in-Europe, Turkmenistan, Uganda, Ukraine, Uzbekistan, Vietnam, Yugoslavia, Zimbabwe

India: Throughout India

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

6. Threat Status:

IUCN:

BSI:

7. Habit and Habitat: Herb

8. Life Form:

9. Economic Importance: Used in cooking

10. Probable Progenitor of:

11. DNA

C-value	Methodology
2C (4.10 pg) ¹	Feulgen microdensitometry ¹
2C (8.85-9.45 pg) ²	Feulgen microdensitometry ²
2C (5.08 ± 0.10 pg) ³	Flow cytometry ³
4C (15.051 – 19.111 pg) ⁴	Feulgen cytophotometry ⁴

12. Basic chromosome number(s):

13. Zygotic chromosome number(s): $2n=22^{2,4,5,6,7,8,9,10,11}$

14. Gametic chromosome number(s): $n=11^{6,11,12,13}$

15. Specialized chromosomes (B chromosomes/Sex chromosomes/Polytene chromosomes/Neocentric chromosomes): Presence of chromosomes with supernumerary constriction⁶
Image file

16. Ploidy level:

Image file

17. Agametoploidy:

18. Nature of polyploidy (auto, segmental, allo, autoallo):

19. Genomic formula:

20. Aberrant chromosome number(s) (aneuploidy, aneusomaty, polysomaty): Somatic variant nuclei were noted with $2n=15$, $2n=24$ and $2n=25$ ⁶

21. Somatic chromosomes:

Karyotype: Majority metacentric to sub-metacentric chromosomes⁶; majority sub-metacentric to sub-telocentric chromosomes⁶; Majority sub-telocentric chromosomes⁹

Chromosome size: 1.4-2.3 μm ⁹; 1.1-6.4 μ ⁶; 53.48-109.18 μm ⁴

NOR chromosome(s): 4NOR^{4,9}; 6NOR⁴; 8NOR⁴

Degree of asymmetry

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: 11 bivalents⁶

Image file

27. Chromosome distribution at anaphase I: Besides normal equal separation, late separation and lagging were observed⁶

28. Genetic diversity:

Chromosomal level

Image file

DNA level^{14,15,16,17}

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