

Final Species Datasheet JamU+CalU+SUK-Phase I

Datasheet No. A-416.010.001
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species: *Carum carvi* L.

Subspecies

Variety

Cultivar

Hybrid

Image file

2. Synonyms: *Carum carvi* f. *carvi*, *C. carvi* f. *gracile* (Lindl.) H. Wolff, *C. carvi* var. *gracile* (Lindl.) H. Wolff, *C. carvi* f. *rhodochranthum* A.H. Moore, *C. carvi* subsp. *rosellum* (Woronow) Vorosch., *C. carvi* f. *rubriflorum* H. Wolff

3. Systematic Position:

APG IV (2016)

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

Bentham and Hooker (1862)

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

4. Distribution:

Global: Afghanistan, Albania, Altay, Amur, Austria, Baltic States, Bangladesh, Belgium, Bulgaria, Buryatiya, China, Chita, Czechoslovakia, Denmark, East European Russia, East Himalaya, Finland, France, Germany, Hungary, India, Inner Mongolia, Iran, Irkutsk, Italy, Kamchatka, Kazakhstan, Khabarovsk, Kirgizstan, Krasnoyarsk, Krym, Kuril Island, Manchuria, Mongolia, Nepal, Netherlands, Norway, Pakistan, Poland, Primorye, Qinghai, Romania, Sakhalin, South European Russia, Spain, Sweden, Switzerland, Tadzhikistan, Tibet, Transcaucasus, Turkey, Turkmenistan, Tuva, Ukraine, Uzbekistan, West Himalaya, West Siberia, Xinjiang, Yakutskiya, Yugoslavia, Algeria, Colorado, Føroyar, Great Britain, Iceland, Illinois, Ireland, Kentucky, Libya, Morocco, New Mexico, Nunavut, South Georgia, Svalbard, Tunisia, Vermont

India: Himachal Pradesh, Jammu and Kashmir, Punjab, Uttar Pradesh

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

6. Threat Status:

IUCN

BSI

7. Habit and Habitat:Herb; Moist meadows, arable land and waste places from lowland to mountain elevations

8. Life Form:Phanerophyte

9. Economic Importance:Used in the treatment of digestive complaints

10. Probable Progenitor of:

11. DNA

C-value

Methodology

4C (19.051±0.005 pg)¹

Feulgen cytophotometry¹

12. Basic chromosome number(s):

13. Zygotic chromosome number(s):2n=20^{1,2,3,4,5,6,7}; 2n=22⁸

14. Gametic chromosome number(s):n=10^{9,10,11}; n=11^{11,12}

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

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):

21. Somatic chromosomes:

Karyotype

Chromosome size: 70.08±0.03¹

NOR chromosome(s): 4NOR¹

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

Image file

27. Chromosome distribution at anaphase I:

28. Genetic diversity:

Chromosomal level

Image file

DNA level¹³

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