

Species Datasheet

Datasheet No. A-416.049.001
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species: *Trachyspermum ammi* (L.) Sprague

Subspecies

Variety

Cultivar

Hybrid

Image file

2. Synonyms: *Ammi copticum* L., *A. glaucifolium* Blanco, *Ammios muricata* Moench, *Apium ammi* (L.) Urb., *Athamanta ajowan* Wall., *Bunium copticum* (L.) Spreng., *Carum ajowan* Benth. & Hook.f., *C. aromaticum* Druce, *C. copticum* (L.) Benth. & Hook.f. ex C.B.Clarke, *C. copticum* (L.) Benth. & Hook. f., *Carum panatjan* Baill., *Cyclospermum ammi* (L.) Lag., *Daucus anisodorus* Blanco, *D. copticus* (L.) Lam., *D. copticus* (L.) Pers., *Helosciadium ammi* (L.) Oken, *H. ammi* (L.) Britton, *Ptychotis coptica* (L.) DC., *Sison ammi* L., *Trachyspermum copticum* (L.) Link

3. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Eudicot
- Clade: Asterids
- Clade: Campanulids
- Order: Apiales Nakai
- Family: Apiaceae Lindl.
- Genus: *Trachyspermum* Link
- Species: *T. ammi* (L.) Sprague

Bentham and Hooker (1862)

- Kingdom: Plantae
- Division: Phanerogamia
- Class: Dicotyledons
- Subclass: Polypetalae
- Series: Calyciflorae
- Cohors: Umbellales
- Ordo: Umbelliferae Juss.
- Genus: *Trachyspermum* Link
- Species: *T. ammi* (L.) Sprague

4. Distribution:

Global: Bangladesh, Myanmar, Saudi Arabia, Turkmenistan, Uzbekistan, India, Czechoslovakia, Ethiopia, Kazakhstan, Kenya, Morocco, Somalia

India: Cultivated

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

6. Threat Status:

IUCN

BSI

7. Habit and Habitat: Herb

8. Life Form:

9. Economic Importance: They are used as a flavoring in savory dishes, including curries, pulses, breads and pastry snacks

10. Probable Progenitor of:

11. DNA

C-value

Methodology

12. Basic chromosome number(s):

13. Zygotic chromosome number(s): $2n=18^{1,2,3,4,5,6}$

14. Gametic chromosome number(s): $n=9^6$; $n=10^7$

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: Majority metacentric chromosomes⁵

Chromosome size: $1.7-2.8\mu\text{m}^5$

NOR chromosome(s): 4NOR^5

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 level⁸

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