Final Species Datasheet JamU+CalU+SUK-Phase I

Datasheet No. A-416.014.001
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species:*Cnidium monnieri* (L.)Cusson ex Juss.
Subspecies
Variety
Cultivar
Hybrid

Image file

2. Synonyms:*Cnidiummonnieri* var. *monnieri*

3. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Eudicot
- Clade: Asterids
- Clade: Campanulids
- Order: ApialesNakai
- Family: ApiaceaeLindl.
- Genus:*Cnidium* Cusson
- Species:*C.monnieri* (L.)Cusson ex Juss.

Bentham and Hooker (1862)

- Kingdom: Plantae
- Division: Phanerogamia
- Class: Dicotyledons
- Subclass: Polypetalae
- Series: Calyciflorae
- Cohors: Umbellales
- Ordo:UmbelliferaeJuss.
- Genus:*Cnidium* Cusson
- Species:*C. monnieri* (L.)Cusson ex Juss.

4. Distribution:

Global: Amur, Assam, Bangladesh, Buryatiya, China, Chita, India, Inner Mongolia, Irkutsk, Japan, Khabarovsk, Korea, Krasnoyarsk, Laos, Manchuria, Mongolia, Primorye, Qinghai, Taiwan, Tibet, Vietnam, Yakutskiya

India: Assam, Meghalaya

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

6. Threat Status:

IUCN

BSI

7. Habit and Habitat: Herb; Riparian meadows and field margins

8. Life Form:

9. Economic Importance:

10. Probable Progenitor of:

11. DNA

C-value **Methodology**

12. Basic chromosome number(s):

13. Zygotic chromosome number(s):2n=12[4];2n=20[1,2,3]; 2n= 24[4]; 2n=36[4]; 2n=48[4]; 2n= 72[4]

14. Gametic chromosome number(s):n= 6[4];n=12[4];n=18[4];n=24[4]; n=36[4]

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: 1.6-3.0µm[4]

NOR chromosome(s)

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: Bivalents range from 6, 12, 18, 24 and 36. In some PMCs, multivalents, bivalents and univalent were observed in various frequencies[4]

Image file

27.Chromosome distribution at anaphase I: Besides normal equal separation, one to two lagging bivalents and unequal separation were observed[4]

28. Genetic diversity:

Chromosomal level

Image file

DNA level[5]

29. Any other information (Apomixis; Inversion; Male sterility; Pollen grain mitosis; Pollen stainability;Translocationsetc): Pollen fertility – 68%[4]