Species Datasheet

Datasheet No. A-140.028.004 **DBT- Networ**
(family.genus.species)

1.Taxon:
Species:
Subspecies: *Lens culinaris*subsp. *orientalis*(Boiss.) Ponert
Variety:
Cultivar:
Hybrid:
Image file

2.Synonyms:*Ervum cyanea* Boiss. &Hohen., *E. cyaneum* Boiss. &Hohen., *E. orientale* Boiss.,*E. orientalis* Boiss., *Lens cyanea* (Boiss. &Hohen.) Alef., *L. orientalis* (Boiss.) Schmalh.,*L. orientalis* (Boiss.) Popov, *L. orientalis* var. *cyaneum* (Boiss. &Hohen.) Popov,*Vicia orientalis* (Boiss.) Beg. &Diratz.

3.Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Eudicots
- Clade: Rosids
- Order: FabalesBromhead
- Family: FabaceaeLindl.
- Subfamily: Faboideae Rudd
- Genus:*Lens*Mill.
- Species: *L.culinaris*Medik.
- Subspecies: *L. culinaris*subsp. *orientalis*(Boiss.) Ponert

Bentham and Hooker (1862)
Kingdom: Plantae
Division:Phanerogamia
Class: Dicotyledons
Subclass: Polypetalae
Series: Calyciflorae
Cohors: RosalesBercht. & J. Presl
Ordo: Leguminosae Juss.
Subordo: PapilionaceaeGiseke
Genus: *Lens*Mill.
Species: *L.culinaris*Medik.
Subspecies: *L. culinaris*subsp. *orientalis*(Boiss.) Ponert

4.Distribution:

Global: Asia, Africa and Europe

India: Central India and Sub-Himalayan belt

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

6.Threat Status:

IUCN:

BSI:

7.Habit and Habitat: Twining habit, Height~11 cm.Temperate, subtropical andtropical at higher elevation.

8.Life Form: Chamaephytes

9.Economic Importance:

10.Probable Progenitor of: Progenitor of *L.culinaris* subsp. *culinaris*[4, 57,60,61,67,81,82,86,87,88,89]

11.DNA
C-value **Methodology**

12.Basic chromosome number(s):x=7[7,88]

13. Zygotic chromosome number(s):2n=14[6,7,87,91]

14. Gametic chromosome number(s):n= 7[6,7,91]
15.Specialized chromosomes (B chromosomes/Sex chromosomes/Polytene chromosomes/Neocentric chromosomes):
Image file

16.Ploidy level: Diploid[6,7,8,87,91]
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:6,7,8,26,34,37,87,91

Karyotype Majoritymetacentric /submetacentric chromosomes
Chromosome size Medium
NOR chromosome(s) 2
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:18S-5.8S-25S and 5S ribosomal gene families [37,40] and pLc30 and pLc7 repeated DNA sequences[80]
Image file

24.Genomic in situ hybridization:
Image file

25. Linkage map:[44,47]
Image file

26.Chromosome associations:

Female meiosis

Male meiosis7 II[7,8]
Image file

27.Chromosome distribution at anaphase I:7:7[7]

28. Genetic diversity:

Chromosomal level[40]
Image file

DNA level[41,48,49,57,60,61,66,67,70,75,78,81,82,85,86]

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