Species Datasheet

Datasheet No. A-140.028.003
(family.genus.species)

DBT- Network Programme

1.Taxon:

Species:
Subspecies:*Lens culinaris* subsp. *odemensis* (Ladiz.) M.E.Ferguson& al.
Variety:
Cultivar:
Hybrid:

Image file

2. Synonyms:*Lens odemensis*Ladiz.

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. *odemensis* (Ladiz.) M.E.Ferguson& al.

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. *odemensis* (Ladiz.) M.E.Ferguson& al.

4.Distribution:

Global: Israel

India: Experimental stations

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

6.Threat Status:

IUCN:

BSI:

7.Habit and Habitat: Climbing herb.

8.Life Form: Chamaephytes

9.Economic Importance: Gene source for biotic and abiotic stress tolerance in cultivated lentil.

10.Probable Progenitor of: Might have contributedtothegene pool of*L.culinaris*subsp.

culinaris[48,95]

11.DNA

C-value **Methodology**

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

13. Zygotic chromosome number(s):2n=14[6,7,8,26,34,87, 88,93,94]

14. Gametic chromosome number(s):n= 7 [4,6,7,34,93]

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

Image file

16.Ploidy level: Diploid[7,8,34]

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:[7,8,37,40]

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 5Sribosomal gene families [37, 40] andpLc30 and pLc7 repeated DNA sequences [39,80]

Image file

24.Genomic in situ hybridization:

Image file

25.Linkage map:

Image file

26.Chromosome associations:

Female meiosis

Male meiosis7 II [7]
Image file

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

28.Genetic diversity:

Chromosomal level
Image file

DNA level[41,48,49,57,60,66 -70,81,82,85,86]

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