Species Datasheet

Datasheet No. A-140.028.008
(family.genus.species)

DBT- Network Programme

1.Taxon:

Species: *Lens nigricans*(M. Bieb.) Grand.
Subspecies:
Variety:
Cultivar:
Hybrid:

Image file

2.Synonyms:*Ervum nigricans* M.Bieb., *E. sylvaticum* Fisch., *Lathyrus nigricans* (M.Bieb.) Peterm.,*Lens culinaris* subsp. *nigricans* (M.Bieb.) Thell,*L. esculenta* subsp. *nigricans* (M.Bieb.) Thell, *L. villosa* (Pomel) Batt.,*Vicia marschallii* Arcang., *V. nigricans* (M.Bieb.) Janka

3.Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Eudicots
- Clade: Rosids
- Order: FabalesBromhead
- Family: FabaceaeLindl.
- Genus:*Lens*Mill.
- Species: *L. nigricans* (M. Bieb.) Grand.

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. nigricans* (M. Bieb.) Grand.

4.Distribution:

Global: Albania, Algeria, Armenia, Balearic Is, Bulgaria, Canary Is, Corsica, Crete, Cyprus, East Aegean Is (Greek), former Yugoslavia, France, Greece, Gruzia, Italy, Krym, Morocco, Portugal, Sardinia, Sicily, Spain, Tunisia, Turkey in Asia, Turkey in Europe, Ukraine

India: Experimental stations

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

6.Threat Status:

IUCN:

BSI:

7.Habit and Habitat: Slenderherb ortwining vine, height ~45cm.Temperate, subtropicaland tropical at higher elevations

8.Life Form: Chamaephytes

9.Economic Importance: Potential for pest resistance in lenti .Tertiary gene pool resource for lentil.

10. Probable Progenitor of:

11.DNA
C-value **Methodology**

12.Basic chromosome number(s):x=7 [4,7,26,93]

13. Zygotic chromosome number(s):2n=14[4,6,7,26,87,93]

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

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

16.Ploidy level: Diploid[4,6,7,26,87,93,94]
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:[4,7, 26,37,40,93]

Karyotype Majority metacentric /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 sequences [39]
Image file

24.Genomic in situ hybridization:
Image file

25. Linkage map:
Image file

26.Chromosome associations:

Female meiosis

Male meiosis7II[4,6,7,93]
Image file

27.Chromosome distribution at anaphase I:7:7 [93]

28.Genetic diversity:

Chromosomal level
Image file

DNA level[48,49,57,59,60,66,67,69,80,81,82,85,86]

29.Any other information (Apomixis; Inversion; Male sterility;Pollen grain mitosis; Pollen stainability;Translocationsetc.): Pollen stainability 67 % [93]