

Datasheet No. A-097.002.005
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species: *Luzula multiflora* (Ehrh.) Lej.

Subspecies

Variety

Cultivar

Hybrid

Image file

2. Synonyms: *Cyperella campestris* var. *multiflora* (Ehrh.) MacMill., *Gymnodes multiflora* Fourr., *Juncooides campestris* var. *multiflora* (Ehrh.) E.Sheld., *J. erecta* Boulger, *J. multiflora* Druce, *Juncus campestris* var. *multiflorus* Ehrh., *J. campestris* var. *tenuis* Retz., *J. erectus* Pers., *J. multiflorus* (Ehrh.) Ehrh., *J. nemorosus* Host, *Luzula campestris* subsp. *carpetana* Rivas Mart., *L. campestris* subsp. *erecta* P.Fourn., *L. campestris* subsp. *multiflora* (Ehrh.) Schübl. & G.Martens, *L. campestris* subsp. *multiflora* (Ehrh.) Buchenau, *L. campestris* var. *groenlandica* Laest., *L. campestris* var. *multiflora* Celakov, *L. campestris* var. *nemorosa* (Host) E.Mey., *L. campestris* var. *subspicata* Laest., *L. erecta* Desv., *L. erecta* var. *pallens* Rouy, *L. intermedia* Figert, *L. intermedia* Spenn., *L. intermedia* var. *multiflora* (Ehrh.) Spenn., *L. multiflora* f. *umbrosa* Neuman, *L. multiflora* subsp. *occidentalis* V.I.Krecz., *L. multiflora* subsp. *pyrenaica* (Sennen) P.Monts., *L. multiflora* subsp. *tenella* (E.Mey.) Kouharov, *L. multiflora* subsp. *thracica* Kouharov, *L. multiflora* var. *flexuosa* Beyer, *L. multiflora* var. *intermedia* Koidz., *L. multiflora* var. *multiflora*, *L. multiflora* var. *pallescens* Bluff & Fingerh., *L. multiflora* var. *pallida* Parl., *L. multiflora* var. *tenuis* Satake, *L. multiflora* var. *uliginosa* Greml., *L. nemorosa* Homem., *L. spicata* var. *tenella* E.Mey., *L. tenella* Miel., *L. yakusimensis* (Masam) Masam.

3. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Monocots
- Order: Poales Small
- Family: Juncaceae Juss.
- Genus: *Luzula* DC.
- Species: *L. multiflora* (Ehrh.) Lej.

Bentham and Hooker (1862)

- Kingdom: Plantae
- Division: Phanerogamia
- Class: Monocotyledones
- Series: Calycineae
- Ordo: Juncaceae Juss.
- Genus: *Luzula* DC.
- Species: *L. multiflora* (Ehrh.) Lej.

4. Distribution:

Global: Alaska, Albania, Alberta, Aleutian Island, Algeria, Altay, Amur, Argentina, Austria, Baltic States, Belarus, Belgium, British Columbia, Bulgaria, Buryatiya, Central European Rus, China, Chita, Connecticut, Corse, Costa Rica, Czechoslovakia, Delaware, Denmark, East European Russia, Falkland Island, Finland, France, Føroyar, Germany, Great Britain, Greece, Greenland, Hungary, Iceland, Illinois, India, Inner Mongolia, Iowa, Iran, Ireland, Irkutsk, Italy, Japan, Kamchatka, Kazakhstan, Kentucky, Khabarovsk, Kirgizstan, Korea, Krasnoyarsk, Krym, Kuril Island, Labrador, Magadan, Maine, Manitoba, Massachusetts, Michigan, Minnesota, Mongolia, Montana, Morocco, Netherlands, New Brunswick, New Hampshire, New Jersey, New York, Newfoundland, North Caucasus, North Dakota, North European Russia, Northwest European R, Northwest Territorie, Norway, Nova Scotia, Ohio, Ontario, Oregon, Pennsylvania, Poland, Portugal, Primorye, Prince Edward I., Québec, Romania, Sakhalin, Saskatchewan, South Dakota, Sout European Russia, Spain, Sweden, Switzerland, Tadzhikistan, Tennessee, Tibet, Transcaucasus, Tunisia, Turkey, Turkey-in-Europe, Turkmenistan, Tuva, Ukraine, Uzbekistan, Vermont, Virginia, West Siberia, West Virginia, Wisconsin, Xinjiang, Yakutskiya, Yugoslavia, Yukon

India: Arunachal Pradesh, Jammu and Kashmir, Sikkim, Uttarakhand, West Bengal

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

6. Threat Status:

IUCN

BSI

7. Habit and Habitat: Herb; found in anthropogenic (man-made or disturbed habitats), forest edges, forests, meadows and fields

8. Life Form:

9. Economic Importance:

10. Probable Progenitor of:

11. DNA

C-value

Methodology

2C (2.54 ± 0.01 pg)⁹

Flow cytometry^{9,20}

2C (3.034±0.029 pg)²⁰

12. Basic chromosome number(s):

13. Zygotic chromosome number(s): 2n=24^{3,4,6,10,11,12,13,14,15,20}, 2n=36^{3,4,6,8,9,13,16,17,18,19}, 2n=42²⁰

14. Gametic chromosome number(s): n=12¹⁰; n=18⁸

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

Image file

16. Ploidy level: Hexaploid⁹; polyploid²⁰

Image file

17. Agametoploidy:

18. Nature of polyploidy (auto, segmental, allo, autoallo):

19. Genomic formula:

20. Aberrant chromosome number(s) (aneuploidy, aneusomy, polysomy): Aneuploid chromosome numbers with 2n=35, 2n=40, 2n=41, 2n=44, 2n=45, 2n=46, 2n=47, 2n=49, 2n=50, 2n=79²⁰

21. Somatic chromosomes:

Karyotype

Chromosome size: 0.5-1.4µm²⁰; 1.31 ± 0.19µm⁹; 1.5-3.7µm²⁰

NOR chromosome(s)

Degree of asymmetry

Image file

22. Banding pattern(s): Many chromosomes had three C-positive regions -one on each end and one near middle; other chromosomes had two C-positive regions -one on either chromosome end; several chromosomes had a single large C-band located at one end of the chromosomes¹⁶

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 level

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