

Datasheet No. A-097.001.002
(family.genus.species)

DBT- Network Programme

1. Taxon:

Species: *Juncus articulatus* L.

Subspecies

Variety

Cultivar

Hybrid

Image file

2. Synonyms: *Juncus acutiflorus* var. *pallidiflorus* Schur, *J. adscendens* Host, *J. alpinoarticulatus* subsp. *arthrophyllus* Reichgelt, *J. arthrophyllus* Brenner, *J. articulatus* f. *articulatus*, *J. articulatus* f. *viridiflorus* (Asch. & Graebn.) I.Grint., *J. articulatus* subsp. *macrocephalus* (Viv.) K.Richt., *J. articulatus* subsp. *nigritellus* (F.W.Schultz) K.Richt., *J. articulatus* subsp. *tatewakii* (Satake) Vorosch., *J. articulatus* var. *adscendens* Beck, *J. articulatus* var. *aquaticus* L., *J. articulatus* var. *articulatus*, *J. articulatus* var. *brachycarpus* (Trab.) Maire, *J. articulatus* var. *cuspidatus* (Brenner) Maire, *J. articulatus* var. *fluitans* Wahlenb., *J. articulatus* var. *lindhardii* (Wiinst.) Wiinst., *J. articulatus* var. *littoralis* Patze, E.Mey. & Elkan, *J. articulatus* var. *maritimus* G.Mey., *J. articulatus* var. *nigrescens* Lindem., *J. articulatus* var. *pallescens* Lindem., *J. articulatus* var. *setiformis* Patze, E.Mey. & Elkan, *J. articulatus* var. *subalpinus* Borbás, *J. bracteosus* Kit., *J. castelli* Tineo ex Guss., *J. lampocarpus* Baumg., *J. lampocarpus* f. *brachycarpus* Trab., *J. lampocarpus* f. *gracilis* Montell, *J. lampocarpus* f. *maximus* Erdner, *J. lampocarpus* f. *nanus* Neuman, *J. lampocarpus* f. *natans* Glück, *J. lampocarpus* f. *nigrescens* Zapal., *J. lampocarpus* f. *parviflorus* Racib., *J. lampocarpus* f. *submersus* Glück, *J. lampocarpus* f. *viridans* Kneuck., *J. lampocarpus* f. *viridiflorus* Zapal., *J. lampocarpus* f. *viviparus* (Gaudin) Neuman, *J. lampocarpus* subsp. *macrocephalus* (Viv.) Rouy, *J. lampocarpus* subsp. *nigritellus* (F.W.Schultz) Nyman, *J. lampocarpus* subsp. *repens* (Sond.) Asch. & Graebn., *J. lampocarpus* subsp. *viviparus* Gaudin, *J. lampocarpus* var. *affinis* (Gaudin) Gaudin, *J. lampocarpus* var. *alpigenus* Schur, *J. lampocarpus* var. *alpinus* Spenn., *J. lampocarpus* var. *caespitosus* Zapal., *J. lampocarpus* var. *corymbosus* Neuman, *J. lampocarpus* var. *cuspidatus* Brenner, *J. lampocarpus* var. *erectus* Čelak., *J. lampocarpus* var. *fluitans* W.D.J.Koch, *J. lampocarpus* var. *lindhardii* Wiinst., *J. lampocarpus* var. *littoralis* (Patze, E.Mey. & Elkan) Buchenau, *J. lampocarpus* var. *macrocarpus* Döll, *J. lampocarpus* var. *macrocephalus* (Viv.) Döll, *J. lampocarpus* var. *multiflorus* Lange, *J. lampocarpus* var. *nigritellus* (F.W.Schultz) Macreight, *J. lampocarpus* var. *pallidus* Schur, *J. lampocarpus* var. *parviflorus* (Racib.) Zapal., *J. lampocarpus* var. *patens* Ser. ex Gaudin, *J. lampocarpus* var. *pauciflorus* Sond., *J. lampocarpus* var. *prolifer* Parl., *J. lampocarpus* var. *repens* Sond., *J. lampocarpus* var. *salinus* Schur, *J. lampocarpus* var. *senescens* Buchenau, *J. lampocarpus* var. *stolonifer* (Wohll.) Asch. & Graebn., *J. lampocarpus* var. *suberectus* Spenn., *J. lampocarpus* var. *subobtusus* Neuman, *J. lampocarpus* var. *viviparus* Schur, *J. nigritellus* D.Don, *J. polycephalus* D.Don ex Hook., *J. supinus* var. *nigritellus* F.W.Schultz, *J. tricephalus* J.Gay ex Laharpe, *Phylloschoenus lampocarpus* (Ehrh. ex Hoffm.) Fourr.

3. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Monocots
- Order: Poales Small
- Family: Juncaceae Juss.
- Genus: *Juncus* L.
- Species: *J. articulatus* L.

Bentham and Hooker (1862)

- Kingdom: Plantae
- Division: Phanerogamia
- Class: Monocotyledones
- Series: Calycineae
- Ordo: Juncaceae Juss.
- Genus: *Juncus* L.
- Species: *J. articulatus* L.

4. Distribution:

Global: Afghanistan, Alaska, Albania, Algeria, Altay, Amur, Arizona, Austria, Azores, Balears, Baltic States, Belarus, Belgium, British Columbia, Bulgaria, Buryatiya, Canary Island, Central European Rus, China, Chita, Colorado, Connecticut, Corse, Cyprus, Czechoslovakia, Denmark, East Aegean Island, East European Russia, Finland, France, Føroyar, Germany, Great Britain, Greece, Hungary, Iceland, Idaho, Illinois, India, Indiana, Inner Mongolia, Iran, Iraq, Ireland, Irkutsk, Italy, Japan, Kamchatka, Kazakhstan, Kentucky, Khabarovsk, Kirgizstan, Korea, Krasnoyarsk, Kriti, Krym, Kuril Island, Lebanon-Syria, Libya, Madeira, Maine, Manchuria, Massachusetts, Mexico Northeast, Mexico Northwest, Michigan, Minnesota, Mongolia, Morocco, Nebraska, Nepal, Netherlands, Nevada, New Brunswick, New Hampshire, New Jersey, New Mexico, New York, Newfoundland, North Carolina, North Caucasus, North European Russia, Northwest European R, Norway, Ohio, Ontario, Oregon, Pakistan, Palestine, Pennsylvania, Poland, Portugal, Primorye, Prince Edward I., Qinghai, Québec, Rhode I., Romania, Sakhalin, Sardegna, Sicilia, South Dakota, South European Russia, Spain, Sweden, Switzerland, Tadzhikistan, Tibet, Transcaucasus, Tunisia, Turkey, Turkey-in-Europe, Turkmenistan, Tuva, Ukraine, Utah,

Uzbekistan, Vermont, Vietnam, Virginia, Washington, West Himalaya, West Siberia, West Virginia, Wisconsin, Xinjiang, Yakutskiya, Yugoslavia, Antipodean Is., Argentina South, Chatham Is., New South Wales, New Zealand North, New Zealand South, Norfolk Island, Peru, South Australia, Tristan da Cunha, Victoria, Western Australia

India: Arunachal Pradesh, Assam, Himachal Pradesh, Jammu and Kashmir, Meghalaya, Punjab, Uttarakhand

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

6. Threat Status:

IUCN: Least concern

BSI

7. Habit and Habitat: Rhizomatous herb; grows in part shade, sun; wet sandy or calcareous soil; shores, banks, ditches, wet meadows

8. Life Form:

9. Economic Importance: The inflorescence and root are used as hypnagogic, sedative, spasmolytic, local anesthetic and anticancer agent

10. Probable Progenitor of:

11. DNA

C-value

Methodology

2C (3.7 pg)¹

Feulgen densitometry¹

12. Basic chromosome number(s):

13. Zygotic chromosome number(s): 2n=40²; 2n=80^{1,3,4,5,6,7,8,9}

14. Gametic chromosome number(s): n=30¹⁰; n=40^{11,12,13}

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

Image file

16. Ploidy level: Octaploid¹

Image file

17. Agameteoploidy:

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

19. Genomic formula:

20. Aberrant chromosome number(s) (aneuploidy, aneusomy, polysomy):

21. Somatic chromosomes:

Karyotype

Chromosome size

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

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):