

**1. Taxon:**Species: *Juncus bufonius* L.

Subspecies

Variety

Cultivar

Hybrid

Image file

**2. Synonyms:** *Cyperus bufonius* Maack ex Trautv., *Juncus aletaiensis* K.F.Wu, *J. bilineatus* Gand., *J. bufonius f. alpinus* (Schur) I.Grint., *J. bufonius f. bracteatus* Pamp., *J. bufonius f. bufonius*, *J. bufonius f. divaricatus* Racib., *J. bufonius f. filiformis* Klinge, *J. bufonius f. giganteus* (Asch. & Graebn.) Nyár., *J. bufonius f. scoparius* (Asch. & Graebn.) Nyár., *J. bufonius* subsp. *juzepczukii* (V.I.Krecz. & Gontsch.) Soó, *J. bufonius* var. *alpinus* Schur, *J. bufonius* var. *bufonius*, *J. bufonius* var. *capillaris* Rchb., *J. bufonius* var. *compactus* Celak., *J. bufonius* var. *congestus* Wahlenb., *J. bufonius* var. *dolichophyllus* Zapal., *J. bufonius* var. *filiformis* Lojac., *J. bufonius* var. *gracilis* St-Amans, *J. bufonius* var. *gramineus* Lojac., *J. bufonius* var. *grandiflorus* Schult. & Schult.f., *J. bufonius* var. *juzepczukii* (V.I.Krecz. & Gontsch.) Vorosch., *J. bufonius* var. *laxus* Celak., *J. bufonius* var. *procerior* Roth, *J. bufonius* var. *pumilio* Griseb., *J. bufonius* var. *subauriculatus* Buchenau, *J. bufonius* var. *suffocatus* Lojac., *J. bufonius* var. *susianus* Nábelek, *J. bufonius* var. *tuberiferus* Krylov, *J. bufonius* var. *typicus* Husn., *J. bufonum* Bubani, *J. cespifolius* Raf., *J. congestus* Nees, *J. creticus* Raf., *J. divaricatus* Gilib., *J. erythropodus* V.I.Krecz., *J. fasciatus* Lojac., *J. istriacus* Gand., *J. juzepczukii* V.I.Krecz. & Gontsch., *J. leptocladus* Hayata, *J. plebeius* R.Br., *J. prolifer* Kunth, *J. pumilus* Raf., *Schoenusferrugineus* Krock., *Tenageia bufonia* Fourr.

**3. Systematic Position:****APG IV (2016)**

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

**Bentham and Hooker (1862)**

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

**4. Distribution:**

**Global:** Afghanistan, Alabama, Alaska, Albania, Alberta, Algeria, Altay, Amur, Argentina, Arizona, Arkansas, Austria, Azores, Bahamas, Balearics, Baltic States, Bangladesh, Belarus, Belgium, Bolivia, Borneo, Brazil South, British Columbia, Bulgaria, Buryatiya, California, Canary Island, Cape Provinces, Central European Rus, Chad, Chile, China, Chita, Colombia, Colorado, Connecticut, Costa Rica, Cuba, Cyprus, Czechoslovakia, Denmark, East Aegean Is., East European Russia, East Himalaya, Ecuador, Egypt, Ethiopia, Falkland Island, Finland, Florida, France, Free State, Føroyar, Georgia, Germany, Great Britain, Greece, Guatemala, Hainan, Hawaii, Hungary, Iceland, Illinois, India, Indiana, Inner Mongolia, Iowa, Iran, Iraq, Ireland, Irkutsk, Italy, Jamaica, Japan, Juan Fernández Is, Kamchatka, Kansas, Kazakhstan, Kentucky, Kenya, Khabarovsk, Kirgizstan, Korea, Krasnoyarsk, Kriti, Krym, Kuril Is., Labrador, Lebanon-Syria, Leeward Island, Libya, Louisiana, Madagascar, Madeira, Magadan, Maine, Manchuria, Manitoba, Massachusetts, Mauritania, Mauritius, Mexican Pacific Island, Mexico, Michigan, Minnesota, Missouri, Mongolia, Montana, Morocco, Myanmar, Nebraska, Nepal, Netherlands, New Hampshire, New Jersey, New Mexico, New South Wales, New York, New Zealand North, New Zealand South, Newfoundland, North Carolina, North Caucasus, North Dakota, North European Russi, Northern Territory, Northwest European R, Northwest Territorie, Norway, Nova Scotia, Nunavut, Ohio, Oklahoma, Ontario, Oregon, Pakistan, Palestine, Paraguay, Pennsylvania, Peru, Philippines, Poland, Portugal, Primorye, Prince Edward I., Qinghai, Queensland, Québec, Rhode I., Romania, Rwanda, Sakhalin, Sardegna, Saskatchewan, Sicilia, Sinai, Socotra, South Australia, South Dakota, South European Russi, Spain, Sri Lanka, Sudan, Sweden, Switzerland, Tadzhikistan, Taiwan, Tasmania, Tennessee, Texas, Thailand, Tibet, Transcaucasus, Tristan da Cunha, Tunisia, Turkey, Turkey-in-Europe, Turkmenistan, Tuva, Uganda, Ukraine, Uruguay, Uzbekistan, Venezuela, Vermont, Victoria, Vietnam, Virginia, Washington, West Siberia, West Virginia, Western Australia, Wisconsin, Wyoming, Xinjiang, Yakutskiya, Yemen, Yugoslavia

**India:** Arunachal Pradesh, Assam, Bihar, Haryana, Himachal Pradesh, Jammu and Kashmir, Kerala, Madhya Pradesh, Punjab, Rajasthan, Sikkim, Tamil Nadu, Uttarakhand, Uttar Pradesh, West Bengal

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

**6. Threat Status:**

IUCN

BSI

**7. Habit and Habitat:** Rhizomatous herb; occurs in wet grasslands, swamps, edges of lakes, river banks and stream sides between 100 and 3,500 meters

**8. Life Form:**

**9. Economic Importance:** Used as fodder for wild cattle

**10. Probable Progenitor of:**

**11. DNA**

C-value

2C (2.6 pg)<sup>1</sup>

**Methodology**

Feulgen densitometry<sup>1</sup>

**12. Basic chromosome number(s):**

**13. Zygotic chromosome number(s):** 2n=30<sup>14</sup>; 2n=34<sup>15</sup>; 2n=60<sup>16</sup>; 2n=80<sup>17</sup>; 2n=106<sup>18</sup>; 2n=108<sup>3</sup>; 2n=120<sup>16,19</sup>

**14. Gametic chromosome number(s):** n=30<sup>10</sup>

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

Image file

**16. Ploidy level:**

Image file

**17. Agametoploidy:**

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

**19. Genomic formula:**

**20. Aberrant chromosome number(s) (aneuploidy, aneusomy, polysomy):** Variation in somatic chromosome numbers with 2n=27-36, 2n=53-74 and 2n=78-100<sup>20</sup>

**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 (Apomixis; Inversion; Male sterility; Pollen grain mitosis; Pollen stainability;Translocationsetc):**