Species Datasheet

-

Datasheet No. G-011.007.003
(family.genus.species)

1.Taxon:

Species: *Juniperuscommunis*L.
Subspecies:
Variety:
Cultivar:
Hybrid:

Image file

2. Synonyms:*Juniperus albanica* Penzes, *J. argaea* Balansa ex Parl., *J. borealis* Salisb., *J. caucasica* Fisch. ex Gordon, *J. communis* var. *arborescens* Gaudin, *J. communis* var. *aurea* G.Nicholson, *J. communis* f. *aurea* (G.Nicholson) Rehder, *J. communis* var. *brevifolia* Sanio, *J. communis* subsp. *brevifolia* (Sanio) Penzes, *J. communis* var. *communis,* *J. communis* var. *compressa* Carriere, *J. communis* f. *compressa* (Carriere) Rehder, *J. communis* f. *crispa* Browicz&Ziel., *J. communis* subsp. *cupressiformis* Vict. &Sennen ex Penzes, *J. communis* var. *erecta* Pursh, *J. communis* var. *fastigiata* Parl., *J. communis* var. *hemisphaerica* (J.Presl&C.Presl) Parl., *J. communis* subsp. *hemisphaerica* (J.Presl&C.Presl) Nyman, *J. communis* var. *hispanica* Endl., *J. communis* var. *montana* Neilr., *J. communis* var. *oblonga* Loudon, *J. communis* var. *oblonga-pendula* Loudon, *J. communis* f. *oblonga-pendula* (Loudon) Beissn., *J. communis* subsp. *pannonica* Penzes, *J. communis* var. *pendens* Sudw., *J. communis* var. *pendula* Carriere, *J. communis* f. *pendula* (Carriere) Formanek, *J. communis* var. *pendula-aurea* Senecl., *J. communis* f. *pendulina* Kuphaldt, *J. communis* f. *pungens* Velen., *J. communis* var. *reflexa* Parl., *J. communis* var. *stricta* Carriere, *J. communis* f. *stricta* (Carriere) Rehder, *J. communis* var. *suecica* (Mill.) Aiton, *J. communis* f. *suecica* (Mill.)Beissn., *J. communis* var. *variegata-aurea* Carriere, *J. compressa* Carriere, *J. cracovia* K.Koch, *J. dealbata* Loudon, *J. depressa* Stevels, *J. difformis* Gilib., *J. echinoformis* Rinz ex Bolse, *J. elliptica* K.Koch, *J. fastigiata* Knight, *J. hemisphaerica* C.Presl, *J. hibernica* Lodd. ex Loudon, *J. hispanica* Booth ex Endl., *J. interrupta* H.L.Wendl. ex Endl., *J. kanitzii* Csato, *J. microphylla* Antoine, *J. niemannii* E.L.Wolf, *J. oblonga-pendula* (Loudon) Van Geert ex K.Koch, *J. oblongopendula* Loudon ex Beissn., *J. occidentalis* Carriere, *J. oxycedrus* subsp. *hemisphaerica* (J.Presl&C.Presl) E.Schmid, *J. reflexa* Gordon, *J. saxatilis* Lindl. & Gordon, *J. suecica* Mill.,*J. taurica* Lindl. & Gordon, *J. uralensis* Beissn.,*J. vulgaris* Bubani, *J. withmanniana* Carriere, *Sabina dealbata* (Loudon) Antoine, *Thuiaecarpus juniperinus* Trautv.

3.Systematic Position:

Christenhusz*et al.* (2011)

- Class: Equisetopsida C. Agardh
- Subclass: PinidaeCronquist
- Order: Cupressales Link
- Family:Cupressaceae Gray
- Genus: *Juniperus*L.
- Species: *J.communis*L.

Bentham and Hooker (1862)
Kingdom: Plantae
Division:Phanerogamia
Class: Gymnospermeae
Ordo: Coniferae
Tribus:Cupressineae
Genus: *Juniperus*L.
Species: *J. communis*L.

4.Distribution:

Global: Recorded from temperate Eurasia, North Africa, North America N of Mexico. *J. communis* is the most widely distributed conifer species in the world, with a circumpolar distribution extending from ca. 70° N in Alaska, Scandinavia and Siberia to ca. 28° N in the Himalaya.

India: Himachal Pradesh, Jammu & Kashmir, Uttarakhand,Widespread in western Himalayas

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

6.Threat Status:

IUCN: Least Concern

BSI:

7.Habit and Habitat: Small evergreen tree or shrub 10-16m high, this is largely a pioneer woodland species, occupying natural rock outcrops and other places with skeletal soil and abundant sunlight in woodland and light forest, both broad-leaf and coniferous forest.

8.LifeForm: Phanerophytes

9.Economic Importance: The Common Juniper is widely used as an ornamental in parks and gardens.

10. Probable Progenitor of:

11.DNA

C-value	**Methodology**
2C (22.90pg) [26]	Flow cytometry[26]
2C (22.30pg) [26]	Flow cytometry[26]
2C (21.20pg) [26]	Flow cytometry[26]
2C (22.10pg) [29]	Flow cytometry[29]
2C (19.66 pg) [18]	Flow cytometry[18]
2C (19.68 pg) [21]	Flow cytometry[21]

12.Basic chromosome number(s):x=11[2,3, 5, 6 ,7,9, 10, 11, 14, 15, 16, 18, 20, 22, 23, 24, 25]

13. Zygotic chromosome number(s):2n=22[2,3, 5, 6 ,9, 10, 11, 14, 15, 16, 18, 20, 22, 23, 24, 25]

14. Gametic chromosome number(s):n=

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

Image file

16.Ploidylevel: Diploid[2,3, 5, 6 ,9, 10, 11, 14, 15, 16, 18, 20, 22, 23, 24,25]

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:[14, 15, 25]

KaryotypeMedian and submedian[14, 15, 25]

Chromosome size Large[14, 15, 25]

NOR chromosome(s)2 [25]

Degree of asymmetry Symmetrical[14, 15, 25]

Image file

22. Banding pattern(s):CMA+ bands[25]

Image file

23.Physical mapping of chromosomes:

In situ hybridization

Image file

Fluorescent in situ hybridization:35SrDNA[25]

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.):