

Species Datasheet

Datasheet No. A-403.002.002
(family.genus.species)

DBT- Networ

1. Taxon:

Species: *Achillea millefolium* L.

Subspecies

Variety

Cultivar

Hybrid

Image file

2. **Synonyms:** *Achilleaalbida* Willd., *A.alpicola* (Rydb.) Rydb., *A.ambigua* Boiss., *A.ambigua* Pollini, *A.anethifolia* Fisch. ex Herder, *A.angustissima* Rydb., *A.arenicola* A.Heller, *A.bicolor* Wender., *A.borealis* Bong., *A.borealis* var. *arenicola* J.T.Howell, *A.borealis* subsp. *arenicola* (A.Heller) D.D.Keck, *A.borealis* f. *borealis*, *A.borealis* subsp. *borealis*, *A.borealis* var. *borealis*, *A.borealis* subsp. *californica* (Pollard) D.D.Keck, *A.borealis* var. *californica* (Pollard) J.T.Howell, *A.borealis* f. *fusca* (Rydb.) Hulten, *A.californica* Pollard, *A.ceretanica* Sennen, *A.compacta* Lam., *A.coronopifolia* Willd., *A.crassifolia* Colla, *A.cristata* Hort. ex DC., *A.cuspidata* Wall., *A.dentifera* Rchb., *A.eradiata* Piper, *A.fusca* Rydb., *A.gigantea* Pollard, *A.gracilis* Raf., *A.haenkeana* Tausch, *A.intermedia* Schleich., *A.lanata* Lam., *A.lanulosa* Nutt., *A.lanulosa* subsp. *alpicola* (Rydb.) D.D.Keck, *A.lanulosa* var. *alpicola* (Rydb.) Rydb., *A.lanulosa* var. *arachnoidea* Lunell, *A.lanulosa* var. *eradiata* (Piper) M.Peck, *A.lanulosa* var. *lanulosa*, *A.lanulosa* f. *lanulosa*, *A.lanulosa* subsp. *lanulosa*, *A.lanulosa* subsp. *megacephala* (Raup) Argus, *A.lanulosa* f. *peroutkyi* F.Seym., *A.lanulosa* f. *rubicunda* Farw., *A.laxiflora* A.Nelson, *A.laxiflora* Pollard & Cockerell, *A.magna* All., *A.magna* L., *A.magna* Haenke, *A.magna* var. *magna*, *A.marginata* Turcz. ex Ledeb., *A.megacephala* Raup, *A.millefolium* f. *albiflora* Dabrowska, *A.millefolium* var. *alpicola* (Rydb.) Garrett, *A.millefolium* var. *arenicola* (A.Heller) Nobs, *A.millefolium* var. *arenicola* (A.Heller) Ferris, *A.millefolium* var. *asplenifolia* (Vent.) Farw., *A.millefolium* subsp. *atrotegula* B.Boivin, *A.millefolium* subsp. *balearica* Sennen, *A.millefolium* subsp. *borealis* (Bong.) Breitung, *A.millefolium* var. *borealis* (Bong.) Farw., *A.millefolium* var. *californica* (Pollard) Jeps., *A.millefolium* f. *californica* (Pollard) H.M.Hall, *A.millefolium* var. *colliniformis* Dabrowska, *A.millefolium* subsp. *compacta* (Lam.) Bonnier & Layens, *A.millefolium* var. *dipetala* Dabrowska, *A.millefolium* f. *discolor* B.Boivin, *A.millefolium* var. *dissecta* Dabrowska, *A.millefolium* var. *fusca* (Rydb.) G.N.Jones, *A.millefolium* var. *gigantea* (Pollard) Ferris, *A.millefolium* var. *gigantea* (Pollard) Nobs, *A.millefolium* f. *iserana* (Podp.) Hayek, *A.millefolium* var. *iserana* Podp., *A.millefolium* var. *lanulosa* (Nutt.) Piper, *A.millefolium* subsp. *lanulosa* (Nutt.) Piper, *A.millefolium* var. *litoralis* Ehrenb. ex Nobs, *A.millefolium* var. *lobata* Dabrowska, *A.millefolium* var. *maritima* Jeps., *A.millefolium* var. *megacephala* (Raup) B.Boivin, *A.millefolium* f. *millefolium*, *A.millefolium* subsp. *millefolium*, *A.millefolium* var. *millefolium*, *A.millefolium* var. *nigrescens* E.Mey., *A.millefolium* subsp. *occidentalis* (DC.) Hyl., *A.millefolium* var. *occidentalis* DC., *A.millefolium* var. *pacifica* (Rydb.) G.N.Jones, *A.millefolium* var. *puberula* (Rydb.) Nobs, *A.millefolium* var. *puberula* (Rydb.) Ferris, *A.millefolium* f. *rhodantha* Lepage, *A.millefolium* f. *rosea* (Desf.) E.L.Rand & Redfield, *A.millefolium* var. *rosea* (Desf.) Torr. & A.Gray, *A.millefolium* f. *roseiflora* B.Boivin, *A.millefolium* f. *roseoides* Breitung, *A.millefolium* f. *rubicunda* (Farw.) Farw., *A.millefolium* var. *sordida* W.D.J.Koch, *A.millefolium* var. *spathulata* Dabrowska, *A.nabelekii* Heimerl, *A.occidentalis* (DC.) Raf. ex Rydb., *A.ochroleuca* Eichw., *A.ossica* K.Koch, *A.pacifica* Rydb., *A.palmeri* Rydb., *A.pecten-yeneris* Pollard, *A.pratensis* Saukel & R.Langer, *A.pseudo-tanacetifolia* Wierzb. ex Rchb., *A.puberula* Rydb., *A.pumila* Schur, *A.rosea* Desf., *A.setacea* Schwein., *A.sordida* (W.D.J.Koch) Dalla Torre & Sarnth., *A.subalpina* Greene, *A.subhirsuta* Gilib., *A.submillefolium* Klokov & Krytzka, *A.sylvatica* Becker, *A.tanacetifolia* Mill., *A.tenuifolia* Salisb., *A.tenuifolia* var. *albicaulis* (C.A.Mey.) Trautv., *A.tenuis* Schur, *A.tomentosa* Pursh, *A.virgata* Hort. ex DC., *Achilliosmillefoliatus* St-Lag., *Alitubusmillefolium* (L.) Dulac, *A.tomentosus* Dulac, *Chamaemelummillefolium* (L.) E.H.L.Krause, *C.tanacetifolium* (All.) E.H.L.Krause, *C.tomentosum* (L.) E.H.L.Krause

3. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Eudicots
- Clade: Superasterids
- Clade: Asterids
- Order: Asterales Link
- Family: Asteraceae Bercht. & J. Presl
- Genus: *Achillea* L.
- Species: *A.millefolium* L.

Bentham and Hooker (1862)

Kingdom: Plantae
Division: Phanerogamia
Class: Dicotyledons
Subclass: Gamopetalae
Series: Inferae
Cohors: Asterales Link
Ordo: Compositae Giseke
Genus: *Achillea* L.
Species: *A.millefolium* L.

4. Distribution:

Global: Argentina, Australia, Bolivia, Brazil, Canada, Caribbean, Chile, China, Colombia, Costa Rica, Ecuador, Europe, Greenland, Guatemala, Honduras, India, Mexico, Mongolia, New Zealand, Nicaragua, USA

India: Kerala, Maharashtra, Tamil Nadu

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

6.Threat Status:

IUCN: Least Concern

BSI:

7.Habit and Habitat:Erect, pubescent herb.The species grows in Alpine or subalpine zones, anthropogenic (man-made or disturbed habitats), cliffs, balds, or ledges, meadows and fields, mountain summits and plateaus, ridges or ledges, shores of rivers or lakes.

8.Life Form:Chamaephytes

9.Economic Importance:Used as a medicine, fumigant, and insecticide, common plant grown in gardens as ornamental

10. Probable Progenitor of:

11.DNA

C-valueMethodology

2C(16.2 pg)²⁹ Flow cytometer

12.Basic chromosome number(s): $x=9^{1,9}$

13. Zygotic chromosome number(s): $2n=18^{9-13,21}$, $2n=36^{3-9,21}$, $2n=54^{15-20,21}$, $2n=72^{14,21}$

14. Gametic chromosome number(s): $n=9^{13,23}$, $n=18^{7,22}$

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

Image file

16.Ploidy level:Diploid^{9-13,21}, Tetraploid^{3-9,21}, Hexaploid^{15-20,21}, Octaploid^{14,21}

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:^{3,9,21}

Karyotype Majority metacentric chromosomes

Chromosome size

NOR chromosome(s)5

Degree of asymmetrySymmetrical

Image file

22. Banding pattern(s):CMA/DAPI banding³

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^{9,11,23}

Image file

27. Chromosome distribution at anaphase I:^{9,23}

28. Genetic diversity:

Chromosomal level⁹

Image file

DNA level^{21,24,25,26}

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