

Species Datasheet

Datasheet No. A-030.004.003
(family.genus.species)

DBT- Ne

1.Taxon:

Species: *Sagittaria latifolia* Willd.

Subspecies

Variety

Cultivar

Hybrid

Image file

2. Synonyms: *Sagittaria latifolia* (Willd.) Nieuwl., *S. engelmanniana* subsp. *longirostra* (Micheli) Bogin, *S. esculenta* Howell, *S. gigantea* Riddell, *S. gracilis* Pursh, *S. hastata* Pursh, *S. hastata* var. *gracilis* (Pursh) Nutt., *S. latifolia* f. *diversifolia* B.L.Rob., *S. latifolia* f. *diversifolia* B.L.Rob., *S. latifolia* f. *gracilis* B.L.Rob., *S. latifolia* f. *hastata* B.L.Rob., *S. latifolia* var. *latifolia*, *S.*

latifolia f. *latifolia*, *S. latifolia* var. *major* Pursh, *S. latifolia* var. *obtusata* (Engelm.) Wiegand, *S. latifolia* f. *obtusata* (Muhl. ex Willd.) B.L. Rob., *S. latifolia* var. *pubescens* (Muhl.) J.G.Sm., *S. longirostra* (Micheli) J.G.Sm., *S. obtusata* Muhl. ex Willd., *S. ornithorhyncha* Small, *S. planipes* Fernald, *S. pubescens* Muhl., *S. sagittifolia* f. *gracilis* (Pursh) Britton, *S. sagittifolia* var. *gracilis* (Pursh) Torr., *S. sagittifolia* f. *hastata* (Pursh) Britton, *S. sagittifolia* var. *hastata* (Pursh) Torr., *S. sagittifolia* f. *latifolia* (Willd.) Britton, *S. sagittifolia* var. *latifolia* (Willd.) Muhl., *S. sagittifolia* var. *longirostra* Micheli, *S. sagittifolia* var. *macrophylla* Hook., *S. sagittifolia* f. *obtusata* (Engelm.) Britton, *S. sagittifolia* var. *pubescens* (Muhl.) Micheli, *S. sagittifolia* var. *pubescens* (Muhl.) Torr., *S. sagittifolia* var. *variabilis* (Engelm.) Micheli, *S. sagittifolia* var. *vulgaris* Hook., *S. simplex* Pursh, *S. variabilis* Engelm., *S. variabilis* var. *angustifolia* Engelm., *S. variabilis* f. *angustifolia* E.L.Rand & Redfield, *S. variabilis* var. *diversifolia* Engelm., *S. variabilis* var. *echinocephala* Engelm. ex J.G.Sm., *S. variabilis* var. *gracilis* (Pursh) Engelm., *S. variabilis* f. *hastata* E.L.Rand & Redfield, *S. variabilis* var. *hastata* (Pursh) Engelm., *S. variabilis* var. *latifolia* (Willd.) Engelm., *S. variabilis* var. *obtusata* Engelm., *S. variabilis* f. *obtusata* E.L.Rand & Redfield, *S. variabilis* var. *pubescens* (Torr.) Engelm., *S. variabilis* var. *sagittifolia* Engelm., *S. viscosa* C.Mohr, *Urospatha friedrichsthaliana* Schott

3. Systematic Position:

APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Monocots
- Order: Alismatales R. Br. ex Bercht. & J. Presl
- Family: Alismaceae Vent.
- Genus: *Sagittaria* L.
- Species: *S. latifolia* Willd.

Bentham and Hooker (1862)

Kingdom: Plantae
Division: Phanerogamia
Class: Monocotyledones
Series: Apocarpae
Ordo: Alismaceae
Genus: *Sagittaria* L.
Species: *S. latifolia* Willd.

4. Distribution:

Global: Alabama, Arkansas, British Columbia, California, Caribbean Puerto Rico Carolina, Colombia, Colorado, Connecticut, Costa Rica, Cuba, Czechoslovakia, Dakota, Delaware, Ecuador, Florida, France, Georgia, Germany, Guatemala, Hawaii, Honduras, IllinoisIowa, India, Italy, Kentucky, Louisiana, Maine, Manitoba, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Brunswick, New Hampshire, New Jersey, New York, Nicaragua, Nova Scotia, Ohio, Oklahoma, Ontario, Pennsylvania, Prince Edward I., Québec, Mexico, Rhode I., Romania, Saskatchewan, Spain, Switzerland, Tennessee, Texas, Venezuela, Vermont, Virginia, West Virginia, Western Canada Alberta, Wisconsin,

India: West Himalaya

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

6. Threat Status:

IUCN: Least Concern

BSI:

7. Habit and Habitat: Herbaceous; Aquatic, grows in fresh water in temperate regions

8. Life Form: Hydrophytes

9. Economic Importance: Tubers used as food, similar to potato

10. Probable Progenitor of:

11. DNA

C-value Methodology

12. Basic chromosome number(s): $x=11$ ¹²

13. Zygotic chromosome number(s): $2n=22$ ^{7,8,9,10,11,12,13,14,47}

14. Gametic chromosome number(s): $n=11$ ^{12,14}

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

Image file

16. Ploidy level: Diploid^{8,12}

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:

Karyotype: Majority Sub-telocentric chromosomes^{8,12}

Chromosome size: Small to large¹²

NOR chromosome(s): 2NOR⁸

Degree of asymmetry: Asymmetric⁸

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:¹⁵

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:¹⁶

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