Blue Flag Iris Growing Conditions: Wet Roots/Frequently Submerged



Iris versicolor is a flowering <u>herbaceous perennial plant</u>, growing 10–80 cm (4-31 in) high. It tends to form large clumps from thick, creeping <u>rhizomes</u>. The erect <u>stems</u> generally have basal <u>leaves</u> that are more than 1 cm $(\frac{1}{2} \text{ in})$ wide. Leaves are folded on the midribs so that they form an overlapping flat fan. The well-developed blue flower has 6 <u>petals</u> and <u>sepals</u> spread out nearly flat and have two forms. The longer sepals are hairless and have a greenish-yellow blotch at their base. The inferior ovary is bluntly angled. Flowers are usually light to deep blue (purple and violet are not uncommon) and bloom during May to July. Fruit is a 3-celled, bluntly angled capsule. The large seeds can be observed floating in fall. It is common in sedge meadows, marshes, and along streambanks and shores. The specific epithet *versicolor* means "variously colored"

Soft Rush Growing Conditions: Shallow Water/Wet Conditions



Juncus effusus, with the common names **common rush** or **soft rush**, is a perennial herbaceous <u>flowering plant</u> species in the rush family <u>Juncaceae</u>. *Juncus effusus* grows in large clumps about 1.5 meters (4 ft 11 in) tall at the water's edge along streams and ditches, but can be invasive anywhere with moist soil. It is commonly found growing in humusrich areas like marshes, ditches, fens, and beaver dams.

The stems are smooth cylinders with light <u>pith</u> filling. The yellowish <u>inflorescence</u> appears to emerge from one side of the stem about 20 centimeters (8 in) from the top. In fact, the stem ends there; the top part is the <u>bract</u>, that continues with only a slight color-band marking it from the stem. The lower leaves are reduced to a brown sheath at the bottom of the stem.

Blue Lobelia Growing Conditions: Wet Roots/Frequently Submerged



Lobelia siphilitica, the great blue lobelia, great lobelia, or blue cardinal flower, is a plant species within the family <u>Campanulaceae</u>. Growing up to four feet tall, Great lobelia has a single ridged, unbranched stem, which is smooth or sparsely hairy. Leaves are hairless or scarcely hairy, that vary in shape from elliptical to lance-like, slightly narrowing at the base. They are about 2 inches wide and 2 to 6 inches in length. Leaves are alternately attached to the stem with no leaf stalk. The root system is a central taproot, that occasionally produces <u>basal offshoots</u>.

The flowers are more closely clustered towards the top of the <u>raceme</u> and become more infrequent further down with the lower flowers begin blooming first. Flowers are typically blue or violet, but can be lighter, even white. A curved <u>style</u> spokes between the upper two petals. Seeds are ovular, translucent, and golden brown and are presumed to be distributed by wind or water.

Pickerelweed Growing Conditions: Shallow Water



Pontederia cordata, common name **pickerelweed** (USA) or **pickerel weed** (UK), is a monocotyledonous aquatic plant native to the American continents.

The species grows as an <u>emergent plant</u>, that is, in flooded conditions, so the plant is generally dependent upon <u>aerenchyma</u> in the <u>stem</u> to carry oxygen into the roots. Its <u>metabolism</u>, is, however, also tolerant of low soil oxygen. It is often found in areas where water levels fluctuate naturally, with spring flooding and later summer emergence. The plant flowers in late summer. The purple flowers have yellow markings which may assist in attracting bees for <u>pollination</u> Two species known to pollinate the flowers are <u>Melissodes apicatus</u> and <u>Dufourea novaeangliae</u>. Once the plant begins to produce seeds, the stem supporting the inflorescence bends to submerge the fruits and seeds. Seeds are dormant at the time of dispersal and will not germinate without stratification for 6–8 weeks.

Seashore Mallow Growing Conditions: Shallow Water/Wet Roots/Frequently Submerged



Kosteletzkya pentacarpos, the seashore mallow, also known as the saltmarsh mallow, sweat weed, Virginia saltmarsh mallow, or hibiscus à cinq carpelles, is an <u>herb</u> found in <u>marshes</u> along the eastern seashore of <u>North America</u>, parts of coastal <u>Southern Europe</u>. The pink-flowered seashore mallow is both a <u>perennial</u> and a <u>halophyte</u>, or salt-tolerant plant, that grows in areas where other plants cannot. The plant can grow to above 1 meter in height, the leaves are 6–14 cm long, cordate to lanceolate with toothed margins. The stems and leaves are hairy. Flowers are 5–8 cm across, with 5 petals surrounding a tube consisting of the fused stamens and style. It blooms from July to October with pale to deep pink flowers. It is occasionally planted in gardens.

Lizard's Tail Growing Conditions: Growing Conditions: Shallow Water/Wet Roots/Frequently Submerged



Saururus cernuus. Lizard's-tail is a common immersed in water plant. It grows into small colonies from underground runners. The erect plant is commonly found growing to one to two feet tall, in freshwater marshes and swamps. It blooms in the summer. Lizard's-tail has a bottlebrush spike of white flowers. It is typically six to eight inches long but can be longer. The flower spike arches above the leaves of the plant. After maturity, the flowers become a string of nutlets that resemble a lizard's tail. The leaves are medium sized, about 1 1/2 inches wide, and three to four inches long. They can be arrowhead-shaped or heart-shaped, are on stalks, and are alternate on the stem. Leaf stalks form clasps where they join the stem.

Bulltongue Growing Conditions: Growing Conditions: Shallow Water/Wet Roots/Frequently Submerged



Sagittaria lancifolia, the bulltongue arrowhead, is a <u>perennial</u>, <u>monocot</u> plant in the family <u>Alismataceae</u>, genus <u>Sagittaria</u>. It is <u>native</u> to the southeastern United States. It is known from every coastal state from Delaware to Texas. The plant is conspicuous for its large, lance-shaped leaves which grow up from underground <u>rhizomes</u> and its showy, white three-petaled flowers which form at the end of long, thick stalks. Each flower has three green <u>sepals</u>, three white or pink-tinged petals, at least six <u>stamens</u>, and <u>pistils</u> which may be in separate flowers. The plant likes to grow in fresh or brackish water and is commonly found in ditches, marshes, swamps and along the shores of lakes and streams. Sagittaria lancifolia reproduces both <u>asexually</u> through spreading rhizomes and <u>sexually</u> through reproduction of copious <u>achenes</u>, a dry fruit each of which carries a single seed.

Fireworks Goldenrod

Growing Conditions: Growing Conditions: Shallow Water/Wet Roots/Frequently Submerged



Solidago rugosa 'Fireworks'. Fireworks' is a cultivar of the native herbaceous perennial *Solidago rugosa* in the Asteraceae (daisy) family. Plants form a bushy, upright clump reaching 2 to 3 feet tall and wide of dark-green leaves and grow best in moist, well-drained soil, but are somewhat tolerant of dry and wet soils. In late summer the blooms appear along 18-inch arching stems held above the foliage to provide a stunning display of yellow flowers that resemble fireworks, hence the cultivar name. These blooms are very attractive to various butterflies and bees. Divide every three to four years or as needed. Cut the plant down in early spring before it starts growing again. Use in a pollinator garden or naturalized meadow setting. This plant is resistant to browsing by deer.

Swamp Milkweed

Growing Conditions: Wet Roots/ Frequently Submerged



Asclepias incarnata, the swamp milkweed, rose milkweed, rose milk flower, swamp silkweed, or white Indian hemp, is a <u>herbaceous perennial</u> <u>plant</u> species native to North America. It grows in damp through wet soils and also is cultivated as a garden plant for its <u>flowers</u>, which attract <u>butterflies</u> and other <u>pollinators</u> with <u>nectar</u>. Like most other <u>milkweeds</u>, it has <u>latex</u> containing toxic chemicals, a characteristic that repels insects and other herbivorous animals. Swamp milkweed is an upright, 100 to 150 cm (39 to 59 in) tall plant. The plants bloom in early through mid-summer, producing small, <u>fragrant</u>, pink to mauve (sometimes white) colored flowers in rounded umbellate. The flower color varies from darker shades of purple through soft, pinkish purple. After blooming, green follicles, approximately 12 cm $(4+^{3}/_{4}$ in) long, are produced that when ripe, split open. They then release light or dark brown, flat <u>seeds</u> that are attached to silverwhite, silky hairs which catch the wind.

Swamp Sunflower Growing Conditions: Dry Land/Short Period of Wet Roots



Helianthus angustifolius is a species of <u>sunflower</u> known by the common name narrowleaf sunflower or swamp sunflower. It is native to the south-central and eastern United States, found in all the coastal states from <u>Texas</u> to <u>Long</u> <u>Island</u>, and inland as far as <u>Missouri</u>. It is typically found in the coastal plain habitat (both the <u>Atlantic</u> and <u>Gulf</u>), particularly in wet areas.

Helianthus angustifolius is often cultivated for its bright, showy yellow flowers. Leaves are long and narrow, up to 15 cm (6 inches) long. It is a perennial herb sometimes as much as 150 cm (5 feet) tall. One plant can produce 3-16 flower heads, each with 10-20 <u>ray florets</u> surrounding at least 75 <u>disc florets</u>.

Although swamp sunflower tolerates boggy soil, it spreads rapidly when grown in moist, well-drained soil. The plant tolerates light shade but prefers full sunlight. Too much shade may result in a weak, leggy plant with few blooms. Provide plenty of space; each plant can spread to a width of 4 to 5 feet.

Scarlett Rose Mallow Growing Conditions: Wet Roots/Frequently Submerged



Hibiscus moscheutos, the rose mallow, swamp rose-mallow, crimsoneyed rosemallow, or eastern rosemallow is a species of flowering plant in the family <u>Malvaceae</u>. It is a cold-hardy perennial <u>wetland</u> plant that can grow in large colonies. The hirsute leaves are of variable morphology, but are commonly deltoidal in shape with up to three lobes. This is a popular <u>garden</u> plant. It can be <u>propagated</u> by seed, or by crown divisions during winter dormancy, and some success can be achieved by hard-wood stem cuttings. Numerous hybrids of the native North American *Hibiscus* species have been released by the commercial nursery trade. In cultivation the species or the hybrids can be used in bog gardens or other water features. They are attractive and have wildlife value for nectar-feeders and birds.

Boneset Growing Conditions: Dry Land/Short Periods of Wet Roots



Eupatorium perfoliatum, known as common boneset or just boneset, is a North American <u>perennial plant</u> in the family <u>Asteraceae</u>. It is a common <u>native</u> to the <u>Eastern United States</u> and <u>Canada</u>. *Eupatorium perfoliatum* grows up to 100 cm (39 inches) tall, with opposite, serrate leaves that clasp the stems (<u>perfoliate</u>). The stem is hairy. The plant produces dense clusters of tiny white flower heads held above the foliage. In Illinois, the plant blooms during late summer and early fall.^[5] Its native habitats include damp prairies, bogs, and alluvial woods. *Eupatorium perfoliatum* leaves and roots contain mixed <u>phytochemicals</u>, including <u>polysaccharides</u> (containing <u>xylose</u> and <u>glucuroni</u> <u>c acid</u>), <u>tannins</u>, <u>volatile oil</u>, <u>sesquiterpene lactones</u>, <u>sterols</u>, <u>triterpenes</u>, <u>alkaloids</u>, and various <u>flavonoids</u>, such as <u>quercetin</u>, <u>kaempferol</u>, and <u>caffeic</u> <u>acid</u> derivatives.

White Wild Indigo Growing Conditions: Dry Land/Short Periods of Wet Roots



Baptisia alba, commonly called **white wild indigo** or **white false indigo**, is a <u>herbaceous perennial</u> plant in the bean family <u>Fabaceae</u>. It is native in central and eastern North America.^[1] The plant is typically 2 to 3 feet (0.61 to 0.91 m) tall, but can be taller, with white, pea-like flowers. Leaves have alternate arrangement, and are <u>trifoliate</u>, narrow, and oblong. The preference is full sun and moist to slightly dry soil. The soil can contain significant amounts of loam, clay, gravelly material, or sand. This plant is not fussy about growing conditions, and is easy to grow. However, it dislikes alkaline soil and may fail to bloom in shady conditions. Like other wild indigos, this plant may take several years to reach blooming size, but it is long-lived. The roots increase nitrogen levels in the soil. White flowers occur from a long spike. Blooming occurs from April to July, earlier in the southern part of the range. The species is native to grasslands, but is grown in some gardens. It favors moist soils. *B. alba* is a host plant for caterpillars of the <u>wild indigo duskywing</u> butterfly and the <u>indigo stem borer</u> moth. Bumblebees pollinate the flowers.

Virginia Sweetspire Growing Conditions: Dry Land/Short Periods of Wet Roots



Itea virginica, commonly known as **Virginia willow** or **Virginia sweetspire**, is a small North American flowering shrub that grows in low-lying woods and wetland margins. Virginia willow is native to the southeast United States. *Itea virginica* has small flowers on pendulous <u>racemes</u>. Depending on location, the species will bloom in late spring to early summer. It prefers moist rich soil, but it can tolerate a wide range of soil types. When Virginia willow is used in horticulture it can form large colonies and may form dense root suckers, making the shrub hard to remove. *Itea virginica* is a <u>deciduous shrub</u> that grows to 2.5 m (8.2 ft) tall and 1.5 m (4.9 ft) broad, with alternate, simple <u>leaves</u> on arching stems. The flowers are white or cream, borne in downward pointing slightly curved spikes, in summer. It is a multi-stemmed, suckering and colonizing plant, with the stems branching infrequently except at the tops. In favorable conditions it may become semi-evergreen. The leaves turn shades of red in fall (autumn). It is hardy down to at least $-15 \,^{\circ}C$ (5 °F).