Baptisia E.P. Ventenat

False Indigo

(Lasinia)

Other Common Names: False Lupine or Wild Indigo.
Family: Fabaceae (Leguminosae).

Cold Hardiness: Baptisia vary in cold tolerance from USDA hardiness zones 3 to 10 depending upon the species and provenance selected.

Foliage: Although the alternate leaves may be simple on upper portions of floral stems of some taxa, most species have trifoliate leaves, which are green to bluish green in color and broadly lanceolate, elliptic, ovate, or spatulate in shape and range from 1” to 4” in length; venation is pinnate, often with a slight folding of the blade upward about the midrib; margins are typically entire, bases are usually broadly acuminate to acute, and tips are mostly acute; although petioles may be as long or longer than the leaf on some taxa, they may also be absent with leaves attached directly to the stems; petiolules are typically short or leaflets are essentially sessile to the point of attachment.

Flower: Flowers are generally reminiscent of more narrow versions of pea flowers; most are 1” or less in length; individual flowers are borne on terminal spikes or racemes, the 3” to 12” long inflorescences often exhibit some degree of space between the flowers resulting in a rather open appearance; colors are often showy blues to yellows, but may also be white; most species bloom in spring to early summer depending upon the climate; Baptisia are sometimes noted as butterfly attractants.

Fruit: Dried pods usually mature dark gray, black or dark bluish black in color; pods are spherical to elongated two valued inflated cylinders, often with a long upturned tip like on a fairy slipper, which contain numerous small hard brown to black kidney shaped seeds.

Stem / Bark: Stems — medium to coarse and stiff, the rounded stems are green to glaucous green in color; Buds — tiny, green, foliose vegetative buds typically elongate shortly after formation; floral buds are borne terminally; Bark — usually not applicable as plants dieback to the ground in winter without developing a woody trunk.

Habit: Depending upon the species in question, most Baptisia grown in our region are dieback or semi-evergreen herbaceous perennials with rounded to erect growth habits ranging from not much over 1’ to as tall as 4’ (5’); most Baptisia have medium to coarse textures.

Cultural Requirements: Most Baptisia flower and produce their densest canopies in full sun, but several will survive in partial sun; root systems can be substantial over time; Baptisia require some moisture, even surviving periodic flooding, but also can withstand varying degrees of drier soils; moderately soil pH adaptable, Baptisia can also withstand clay to rocky soils; many require dead foliage removal after seeds mature as they die back to the soil in autumn.

Pathological Problems: Fairly pest and pathogen free, plants seldom require intervention.

Ornamental Assets: Seasonally clean crisp foliage and showy blue, purplish blue, white or yellow flowers are the primary assets.

Limitations & Liabilities: Most are unattractive in winter; plant parts may be poisonous; plants require annual pruning to look tidy; mature Baptisia can be difficult to transplant.

Landscape Utilization: Landscape use as design elements varies among species, but most are at their best in wildflower plantings, transition landscapes or perennial and mixed borders; several are suitable for locations with periodic inundation and thus work well in rain or bog gardens, along stream courses, or beside natural water features; Baptisia can contribute as butterfly and pollinator plants, in addition to serving in cut flower gardens both for flowers and the developing seed pods.

Other Comments: The genus name derives from the Greek word baptisis, meaning to dip something, in reference to the genus’ use in dyeing processes; the roots of some species of Baptisia were once used by early American settlers as an inferior substitute for Indigofera tinctoria L. as a source of blue dyes, hence the name False Indigo.

Native Habitat: Most species are found in the Central and Eastern USA, in alluvial soils along water courses or in other seasonally moist soils; a few are found in drier sites.

Related Taxa: Various authorities include between 20 and 50 species in the genus Baptisia of which most are herbaceous perennials or annuals; perennial species may develop woody bases in some
regions that allow them to function as subshrubs; the herbaceous perennial species are those most often cultivated or encountered in the wild in our region; cultivars are only limitedly available.

**Baptisia australis** (L.) R. Brown ex W.T. Aiton  
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\[\text{Blue False Indigo}\]

*Baptisia caerulea, Baptisia confusa, Baptisia exaltata, Baptisia minor var. aberrans, Baptisia versicolor, Podalyria australis, Podalyria coerulea, Ripasia caerulea, Sophora australis, Sophora caerulea*

- **Baptisia australis**, also known as Baptisia, Blue Wild Indigo, Horsefly Weed, Indigo Weed, Rattlesnake, or Rattlesnake Weed, is a species of herbaceous perennial native to the Eastern and Central USA, but is often cultivated outside its native range for the indigo blue flowers; it occurs naturally as far west as Northeast Texas and Eastern Oklahoma; this erect perennial reaches heights of 3’ to 4’ and can produce open terminal racemes up to 12” in length; the strongly erect thick medium to light green stems develop from a slow growing extensive basal root which can be difficult to transplant once plants reach significant sizes; generally this species is taller and lankier in growth habit than the other three taxa discussed herein; bloom is in late spring to early summer.

- Plants are grown in USDA hardiness zones 3 to 9; best used in small groupings, *B. australis* is mostly utilized in wildflower plantings, transition landscapes, perennial or mixed borders, or sometimes in cut flower gardens where it was grown for the flowers or the 2” to 2½” long inflated dried charcoal black seed pods which rattle when ripe.

- Often found in rich organic or alluvial soils in the Eastern USA, plants should be irrigated and planted in a good garden soil for vigorous growth in much of our region; this species is less tolerant of wet soils than the other *Baptisia* discussed herein, but can withstand briefly wet soils; plants will grow in full sun to part shade, but produce better flowering and denser foliage in full sun; taller than most of our native *Baptisia*, this species may require staking or pruning back after bloom to prevent lodging; the specific epithet means southern in reference to its native range, which is somewhat misleading compared to the other species discussed here.

**Baptisia bracteata** G.H.E. Muhlenberg ex S. Elliott  
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\[\text{Nodding False Indigo}\]

*Baptisia saligna, Podalyria bracteata, Baptisia bracteata var. leucophaea, Baptisia leucophaea*

- Several other common names for *B. bracteata* include Creamy Wild Indigo, Large-Bracted Wild Indigo, Plains False Indigo, Nodding Indigo, Plains Wild Indigo, and Whitestem Wild Indigo; plants form bushy mounds 1’ to 2’ (2½’) tall with equal or greater widths; the roots are perennial becoming almost woody over time, but the foliage dies back annually; foliage is a dark green to glaucous green color with pinnately compound leaves; leaves are typically trifoliate, but may appear to have five leaflets due to the prominent stipules at the base of the leaves; leaflets are ovate or elliptic with variable lengths of 1” to 4”; attractive in foliage in spring and early summer, above ground portions of the plant dieback and turn a dark gray or black later in the season.

- Inflorescences of *B. bracteata* are held in horizontal or drooping racemes, hence the references to nodding in the common name; the individual pea-like flowers of *B. bracteata* are paler, typically a creamy yellow or greenish yellow color, compared to those of *B. sphaerocarpa*; fruit are 1” to 2” long woody textured capsules, black at maturity, which contain hard seeds; inflorescences of *B. bracteata* tend to be partially hidden by the foliage and are not as well presented as those of *B. sphaerocarpa, B. lactea, or B. australis*.

- Nodding False Indigo is a common wildflower of pastures and open areas in its native range, but is much less frequently cultivated than the other *Baptisia* discussed here due to the less showy flowers; most any location with a sunny exposure is suitable for *B. bracteata* as it adapts to a wide range of soil types; although uncertainly defined, *B. bracteata* is probably useful in USDA hardiness zones 3 to 9, assuming the proper provenance is grown.

- The taxa formerly classified as *Baptisia leucophaea* T. Nuttall or the Texas’ Plains Wild Indigo is variously considered to be a separate species, or is considered synonymous with *B. bracteata*, or is relegated to varietal status as *Baptisia bracteata var. leucophaea* (T. Nuttall) J.T. Kartesz and K.N. Gandhi; herein it is treated as a subsumed taxon within *B. bracteata*; the specific epithet refers to the long bracts on this species.

**Baptisia lactea** (C.S. Rafinesque) J.W. Theiret  
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\[\text{White False Indigo}\]

*Baptisia lactea, B. alba, B. canescens, B. bracteata var. lactea, B. bracteata subsp. lactea*

- This species is found in the Midwest and Central USA, typically in a mesic to wet mesic habitat; it is often found in rich organic or alluvial soils in the Eastern USA, plants should be irrigated and planted in a good garden soil for vigorous growth in wildflower plantings; transition landscapes, perennial or mixed borders, or sometimes in cut flower gardens where it was grown for the flowers or the 2” to 2½” long inflated dried charcoal black seed pods which rattle when ripe.

- Often found in rich organic or alluvial soils in the Eastern USA, plants should be irrigated and planted in a good garden soil for vigorous growth in much of our region; this species is less tolerant of wet soils than the other *Baptisia* discussed herein, but can withstand briefly wet soils; plants will grow in full sun to part shade, but produce better flowering and denser foliage in full sun; taller than most of our native *Baptisia*, this species may require staking or pruning back after bloom to prevent lodging; the specific epithet means southern in reference to its native range, which is somewhat misleading compared to the other species discussed here.
(Baptisia alba var. macrophylla, Baptisia leucantha, Baptisia pendula var. macrophylla, Dolichos lactea, Dolichos lacteus, Podalyria alba)

- Other names for *B. lactea* include Prairie Indigo and White Wild Indigo; the medium to medium-coarse textured glaucous green foliage contrasts nicely with the tall sparse racemes of white flowers; plants are erect to 3’ to 6’ tall with about an equal spread; legginess can be a problem at times; as with *B. bracteata*, *B. lactea* dies to the ground in late season, turning dark gray to black; the 1” to 3” long leaflets are broadly elliptic to obovate, rarely spatulate; plants are larger and coarser textured than most *Baptisia*.

- Long open showy racemes can be 8” to 12” long, with some terminal racemes reaching up to 24” in the upper canopy; blooms occur from mid-spring to early summer; flowers are reported to attract bees and butterflies; the large spikes of short stout black pods should be suitable for use in fresh cut and dried arrangements.

- Although adapted to a range of conditions, plants are typically found in seasonally wet soils on higher portions of periodically flooded areas; it is also found in meadow conditions; full sun locations are best; if used in rain gardens or boggy areas locate them on the banks or higher ground in the wetland; *Baptisia lactea* is also adapted to garden conditions; a Texas native, *B. lactea* occurs naturally in the Central Plains, Midwest, and portions of the Southeastern USA, including Arkansas, Louisiana, Oklahoma, East Texas and the upper Gulf Coast; it is sometimes planted elsewhere as a component of rain gardens, bog gardens, mixed annual and perennial borders or in some wildflower plantings; the showy spikes of flowers might also be tried as a spring season cut flower; although uncertain, based on its native distribution *B. lactea* should be useful in USDA hardiness zones 4 to 9a (9b).

- This is a striking species in bloom and deserves greater testing and selection work; the specific epithet means milky, probably in reference to the white flowers.

**Baptisia sphaerocarpa** T. Nuttall  
**Upright Wild Indigo**  
(Baptisia viridis)

- *Baptisia sphaerocarpa* is known by several alternative names including Bush-Pea, Green Wild Indigo, Round-Fruited Baptisia, Wild Indigo, and Yellow Wisteria; one of the most attractive of the False Indigos, *B. sphaerocarpa* has rich green to blue-green foliage with erect narrow terminal racemes of pale to more commonly bright yellow pea-like flowers; racemes vary from 3” to 6” (8”) in length and are held proudly above the dense canopy of foliage; this perennial produces a rounded to spreading mound of foliage 2’ to 3’ tall with an equal or greater width; *Baptisia sphaerocarpa* reminds me a bit of *Galphimia glauca*, the subtropical Basket-Of-Gold, in overall impact but offers much greater cold hardiness; although the foliage dies back each year, it returns from the roots which become almost woody near the base with time; the cultivar ‘Screamin Yellow’ was selected for erect larger bright yellow flower spikes and a dense compact spreading habit compared to the species type and it deserved wider testing in our region.

- Upright Wild Indigo can be grown in a variety of settings including traditional garden soils, but also is suitable for use in rain gardens, bog gardens, and near water features as long as plants are not permanently in water; they have enough drought tolerance to withstand periodic dry periods as well as temporary inundation; the attractive foliage, striking flowers, and interesting seed pods offer multiple reasons to grow this species.

- The specific epithet means spherical fruit in reference to the globe-shaped seed pods that mature with a nearly woody texture; this species is native from Oklahoma east to Missouri, south to Mississippi and west to Texas; based on this distribution, *B. sphaerocarpa* should be useful from USDA hardiness zones 5 through 9.

**References:** Ajilvsgi, 1979; Dobbs, 1999; Duncan and Foote, 1975; Loughmiller and Loughmiller, 1984; Richardson, 2002; Tveten and Tveten, 1993.