

BAPTISIA Genus Overview

The genus *Baptisia* is a member of the Fabaceae, the legume or pea family (some sources place it in Leguminosae). It is native to the Eastern United States, and from Minnesota, south to Texas. The genus name comes from a Greek root word meaning "to dip" in reference to the use of Baptisia as a substitute for indigo dye. This use is also evident in the common names for the genus; False Indigo and Wild Indigo. The genus contains upwards of 25 species, and has become of great interest to breeders within the last 20 years. Programs such as Chicagoland Grows® and Mt. Cuba Center's Trial Garden have focused on introducing and testing new material. This interest has resulted in the release of many new cultivars that showcase the range of ornamental characteristics within the genus. Baptisia have showy pea-like flowers in purple, blue, lavender, white, and yellow. Baptisia is an herbaceous perennial, but its bushy habit allows it to be used as a stand-in for small shrubs. It is versatile enough to use in mixed borders, meadows, and formal gardens. All Baptisia have wildlife value as cover for songbirds, and some sources suggest the black fruit is also eaten by birds. Most have medium textured pea-like foliage in a soft bluegreen color that adds contrast in the garden. Like most members of the Legume Family, deep roots make *Baptisia* drought tolerant, but sensitive to transplant as mature specimens. Presently there are 40 unique taxa within the living collection at the UDBG.

1: Baptisia australis

Native to the United States, a large population of False Blue Indigo occurs in the Midwest from southern Kansas to north Texas. The range is quite interesting in that it is rare in states on either side of the Appalachian Mountains, but is adventive in the northern climes of Wisconsin, Minnesota, Michigan, Vermont, Massachusetts, and New York. Allan Armitage describes the growing of *B. australis* by farmers in Georgia and South Carolina as "one of the first recorded examples of agricultural subsidies". The plant was being grown as a poor substitute to true Indigo (*Indigofera*, among others) that was in short supply in 18th century England. In the present day, *B. australis* is grown for its many horticultural merits. In spring, *B. australis* displays large 10 to 12 inch long flower stalks. The flowers are an indigo blue that last for almost a month. It has a bushy habit, and is 4 feet tall and wide. Plants grown in sun do not need staking, but those grown in more shade might need support. *Baptisia australis* is hardy in Zones 3 to 8. The UDBG has five specimens of False Blue Indigo; *B. australis* var. *minor* 'Blue Pearls', *B. australis* var. *minor*, *B. australis* 'Big Ben', and a hybrid *B. australis* × *B. australis* var. *minor*. *B. australis* 'Big Ben' is especially notable in that it is larger than the straight species in all characteristics. All of the taxa above can be found in the Lepidoptera Trail at the UDBG.

2: Baptisia tinctoria

Commonly called Yellow Wild Indigo, *Baptisia tinctoria* is native from Massachusetts to Georgia, and west to Michigan. It is rare in Wisconsin, Minnesota, Illinois, Indiana and

Kentucky. In Delaware it is native to all three counties. As the common name implies, *B. tinctoria* typically has a yellow flower, but it can vary from a dark yellow to a pale cream. The flower is 1 inch long and wide, but occurs in groups of 4 to 20 on 5 inch racemes in early summer. The flowers are followed by inflated seed pods that are ornamental on their own right. Once the seed are ripe, they rattle in the seed pod. It is at this time that seed should be harvested for propagation and sown when fresh. The plant grows up to 4' in height, but only 1 to 2 feet wide, this habit makes it more suited for informal gardens or meadows. Like other members of the genus, the foliage is pea-like and an attractive silver-green or blue-green. Yellow Wild Indigo requires full sun, and is only hardy to Zone 5. Although slow to start, *B. tinctoria* is a tough and enduring perennial. Currently, the UDBG only has one specimen of *B. tinctoria* in the collection in the Lepidoptera Trail.

3: Baptisia sphaerocarpa

Baptisia sphaerocarpa, commonly called Yellow Wild Indigo, is native to Texas, Louisiana, Mississippi, Arkansas, and Oklahoma. It is found in Missouri as a "naturally" occurring plant, but in fact it was introduced to the state for restoration projects. The yellow flower of B. sphaerocarpa is a "screaming yellow". Allan Armitage states that any cream-colored B. sphaerocarpa are likely B. bracteata var. leucophaea, but he admits that the taxonomy on Baptisia is "mixed up". Yellow Wild Indigo grows 2 to 4 feet in height and 3 feet wide. The leaves are trifoliate, but this species can have the upper leaves of branchlets in pairs rather than threes. This characteristic is a distinguishing identifier, as well as the rounded seeds pods that create the specific epithet. "Sphaero" meaning round, and "carpa" in reference to the seed. Baptisia sphaerocarpa has been used successfully as the parent in many crosses. One cultivar from the Chicago Botanic Garden, B. 'Twilight Prairie Blues' is a cross of Baptisia australis with Baptisia sphaerocarpa. The resulting hybrid has very vigorous growth, and most notably, bicolored yellow and purple flowers! The UDBG has two cultivars of Baptisia sphaerocarpa in the collection. These are B. sphaerocarpa 'Screamin' Yellow', a larger and bolder version of the species, and B. sphaerocarpa 'Dark Yellow' a plant of about the same habit and size as the species, but with darker yellow flowers. Both of these taxa can be found in the Lepidoptera Trail. In addition, a hybrid of B. sphaerocarpa and B. alba called Baptisia 'Carolina Moonlight' is accessioned in the UDBG collection. B. 'Carolina Moonlight' has light yellow flowers, and is a compact 2 to 3 feet in height.

4: Baptisia bracteata

The common name of *Baptisia bracteata* is Long-bract Wild Indigo. A distinguishing feature of this *Baptisia* are the persistent and large stipules. Unlike other *Baptisia*, Long-bract Wild Indigo has a soft pubescence on all parts of the plant which makes the foliage appear more silver-green than other species. Some taxonomists recognize *B. bracteata* var. *glabrescens* as being a glabrous variety of the species. *B. bracteata* has 8 to 10 inch long racemes loosely clustered with soft yellow flowers, blooming in mid to late spring for three weeks. The light green seed pod turns to black at maturity, and is described as "somewhat pendulous". Like *Baptisia tinctoria*, *B. bracteata* requires full sun for optimum habit and bloom. The natural range of this plant is throughout the midwestern United States, with a few populations in Alabama, Georgia, and South Carolina. It is rare in Mississippi, Indiana, Michigan, and Kentucky so should be treated with care in those states. Both the straight species and a variety (*B. bracteata* var. *leucophaea*)

can be found in the Lepidoptera Trail. An interesting cultivar 'Little Texas' grows only to 12 inches, while the straight species can grow up to 2 feet in height.

5: Baptisia alba

Baptisia alba has the broadest range of all the Baptisia, going from South Carolina east to Texas, and north to Wisconsin and Michigan. It is rare in North Carolina and Minnesota. In the literature there is great confusion over white flowered forms of *Baptisia*. *B. bracteata* and *B.* lactea are commonly confused for B. alba in the trade. Even the acceptance of B. lactea as a species comes into question as some sources site it as a synonym of B. alba, and B. leucantha is sometimes recognized as a synonym of B. lactea. In the wild the species, if recognized as such, are able to be distinguished by their very distinct ranges. B. lactea being native from Ohio to Nebraska, and as south as Texas. The white flowers of B. alba give it the common name, white false indigo. The flowers are held on 12 inch racemes supported by dark stems above the foliage. Both the floral display and habit are attractive in the landscape. White false indigo grows to 3 feet in height, and is hardy to zone 5. Baptisia alba is also used as a parent in many popular cultivars for its bloom color, habit, and hardiness. Baptisia 'Purple Smoke' and Baptisia 'Carolina Smoke' both claim B. alba as a parent. This species is good for wildlife as it provides cover for songbirds, is a host plant for some butterfly species, and the inflated seed pods are believed to be eaten by birds. The UDBG has one cultivar of this species in the collection, B. alba var. alba 'Waynes World', as well as one accession of the species. Additionally, numerous B. alba hybrids are located in the Lepidoptera Trail at the UDBG.

Works Cited

The Plant List 1.1: http://www.theplantlist.org/

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Du Pont, Elizabeth. 2004. Landscaping with Native Plants in the Mid-Atlantic Region (2nd ed).

Bailey, L.H. 1949. *Manual of Cultivated Plants*. USDA Plants Database: https://plants.usda.gov

Chicagoland Grows Online Plant Introductions:

http://www.chicagolandgrows.org/perennials/false indigos.php

Please reference BAPTISIA Featured Selections Map pdf for locations of these *Baptisia* at UDBG.