



Homeopathy Drug Baptisia Having Anti-Infective Efficacy Property

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ABSTRACT

The word "to dip" in the genus name is derived from a Greek root, which refers to the use of Baptisia as an indigo dye substitute. The common names for the genus, False Indigo, and Wild Indigo, also reflect this usage. With up to 25 species, the genus has gained significant attention from breeders in the last 20 years. New material has been introduced and tested through programs like Mt. Cuba Center's Trial Garden and Chicagoland Grows. Numerous new cultivars showcasing the genus's array of ornamental qualities have been released as a result of this interest. The vivid pea-like flowers of baptisia come in shades of purple, blue, lavender, white, and yellow. Despite being a herbaceous perennial, baptisia can be used in place of small shrubs due to its bushy habit. It can be used in formal gardens, meadows, and mixed borders due to its versatility. All baptisia are valuable to wildlife because they provide cover for songbirds, and some reports even claim that birds eat the black fruit. The majority have soft blue-green, pea-like foliage with a medium texture that creates contrast in the garden. Baptisia is drought tolerant, like the majority of Legume Family members, but as mature specimens, they are sensitive to transplantation.

Keywords: Dip, Baptisia, Indigo, perennial, songbirds.

Introduction

The use of baptism is just as frequent in the North, so it is not just a Southern cure. It is completely satisfied that it is far too frequently disregarded and then provided without being asked for. If presented as it usually is, it will undoubtedly fail. Empirically, it must be administered in situations where the drug's propensity to cause illness is evident. The only real approach to choosing a treatment for a particular illness is individualized care. If the patient exhibits typhoid symptoms, baptism could be administered; But in this case, success won't occur until the cure is actually indicated. There isn't a remedy that is recommended as frequently, but that doesn't mean it should be misused. It cannot replace the effects of Arnica, Rhus, or any other remedy. Its frequent misfortune and numerous failures can be attributed to this. It will eventually be recognized for its broad range of applications. It will perform admirably outside of "typhoid fever. Brown's Baptisia tinctoria (L.) Traditional American natives used plants in the genus Baptisia and other members of the genus. Another plant-derived dye that was utilized was B. tinctoria leaves (Gr. bapto, Lat. tingere: dye). It belongs to the Leguminosae family of Fabaceae and grows into bushy shrubs that can reach a height of one meter. It has annual aboveground parts and woody perennial rhizomes and roots. There are more than 20 species in the genus Baptisia. Interspecies hybridization is common and has been demonstrated by morphological analysis (Larisey 1940), alkaloid and flavonoid pattern comparison, and pattern identification.

One of the most dangerous bacterial infections in third-world nations is typhoid. Approximately 17 million cases and 600,000 deaths occur worldwide each year due to this incidence (Ivanoff, 1998; Pang et al, 1998). It is brought on by consuming food or water tainted with the S. enterica serovar Typhi, a Gram-negative short bacillus type bacteria (Giannella, 1996). It can cause serious illness because it contains a capsule protein (virulence antigen) and a unique virulence factor.



Figure 1: Picture of *Baptisia* plant.

Morphological Character

The round stems are typically yellowish green in color, erect, frequently widely branched, glabrous, and occasionally slightly pubescent. The bluish green, subsessile cuneate, obovate leaflets of the terminate compound subsessile leaves are 1 to 1.5 mm in length. Yellow flower terminal axillary racemes are arranged loosely. The calyx tube length is 3 to 4 mm, the pedicels are 4 to 5 mm long, and the floral bracts are lanceolate-setaceous to ovate acuminate. With a standard length of about 1 cm, the corolla is papilionaceous, while the wings and keel measure between 1.2 and 1.3 cm. The keel has an upward curvature. There is no base-to-base tube formation among the ten uniformly shaped stamens. The fruit has five seeds and is unilobular and unicarpellary. Mature pods are subglobose to ovoid, strongly rounded at the base and summit, and can reach lengths of up to one cm and widths of up to 0.8 cm. The kidney-shaped, 1–3 mm long, 1–1.5 mm broad seeds range in color from yellow to dark brown.



Figure 2: Picture of the plant *Baptisia tinctoria*

Geographical Distribution

Native to the central and eastern United States, baptisia grows untamed by roadsides, alongside streams, in open meadows, and on the edges of forests. It was used by Cherokees and other Native Americans to make blue dye. Later, when authentic indigo from the Indies became unavailable, European settlers took the same action. Baptisia's common name, Blue False Indigo, originated from this practice.

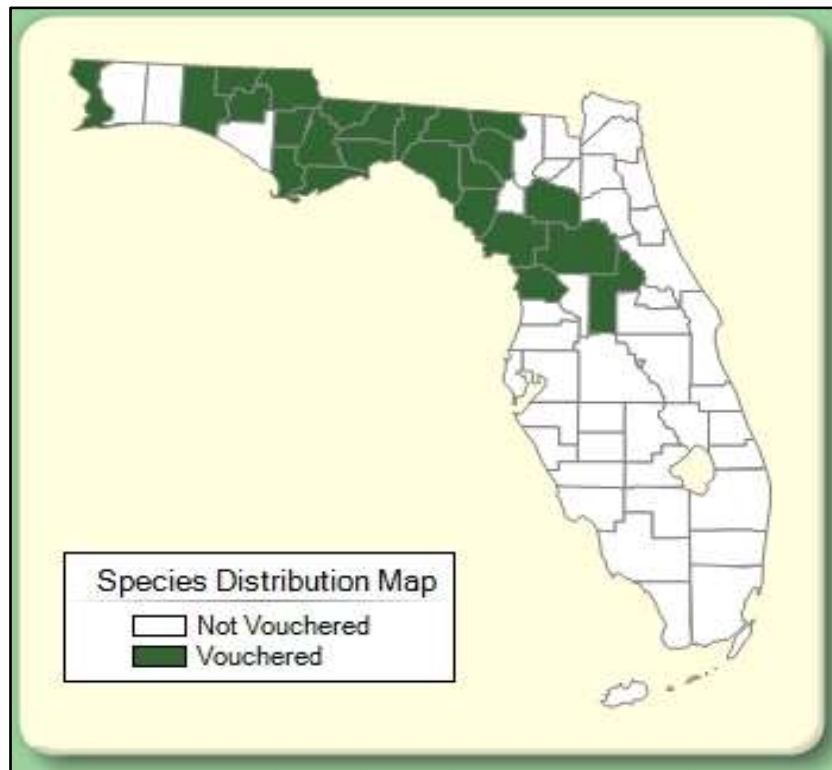


Figure 3: Geographical distribution of Baptisia

Habitat

The naturally occurring, slowly growing plant prefers sandy areas and natural openings with slightly acidic. The majority of these habitats have been converted into agricultural and cultivated areas; in the past, these areas were kept open by animals or spontaneous fires. Thus, the amount of land suitable for *B. tinctoria* has steadily decreased. *B. tinctoria* is a slow-growing plant that reproduces poorly because of its low seed germination rate (VoB 1992). It also does not spread quickly. It most likely regenerates more slowly in nature than it does when samples are taken. As a result, *B. tinctoria* is now found in a few isolated places, and its populations are declining. It will need to be taken into culture to guarantee a steady supply of rhizomes and roots for medicinal use.

Cultivation

These large, robust plants have a very long lifespan. Although they take a while to establish at first, baptisms are hardy and drought-tolerant plants that require little care. These Pea family members are very hardy up to zone 3, and they have lupine-like flowers that are perfect for cutting. They have gorgeous blue-green foliage that stays healthy throughout the summer and grows to a height of three to four feet. Their size makes them the ideal backdrop for perennial companions that bloom later in the season. Depending on the variety, space plants 18 to 30 inches apart.

Light/Watering: Full sun is the ideal condition for plants. They require staking once they get too much shade. Once established, these plants can withstand severe droughts, but consistently moist soil is always preferable for plants.

Fertilizer/Soil and pH: Don't add lime because baptisma prefers slightly acidic soils. The ideal soil is one that is deep, rich, and well-drained, though baptisma grows well in less fertile soils as well. Apply a balanced fertilizer in the early spring and top-dress with additional summer applications, or use a slow-release variety.

Pests/Diseases: Baptisias are long-lived and healthy plants that rarely suffer from diseases of the foliage or insect pests.

Companions: In late spring to early summer, baptisistas, peonies, and Siberian irises bloom together. Even when they are not in bloom, they are still useful because of their lovely foliage.

Reflowering: Baptisias only flower once in the late spring, and if they are deadheaded, which also stops the development of the pretty seedpods, they won't flower again. After flowering, plants look best when they are shaped and trimmed back by one-third, which also gets rid of any late-season floppiness.

Dividing/Transplanting: Since these shrub-like plants grow slowly, division is not necessary for about ten years. Transplanting is challenging due to the deep taproots, but it is possible with careful work, especially when the plants are small.

Early Spring: When new growth emerges, apply a light application of slow-release or balanced fertilizer, or side-dress with organic amendments and compost. During extended rainy periods, top up nitrogen to prevent natural leaching. If the weather is unusually dry, give the soil plenty of water; plants like well-hydrated soil. If preferred, mulch.

Mid-Spring: Partially shaded plants require support. Train foliage to cling to strong stakes or through Peony rings.

Summer: If you don't want seedpods to develop, pinch off the dead flowers. Eliminate any dead or yellowing leaves from your plants. By reducing their height by one-third, plants can be shaped to have the most visually appealing habit for the remainder of the growing season.



Figure 2: Picture of the plant *Baptisia tinctoria*

Chemical Composition

The chemical composition of the plant *Baptisia tinctoria* are:

- Baptisine
- Baptisol
- Biochanin-a
- Genistein
- Pseudobaptigenin
- Tectorigenin

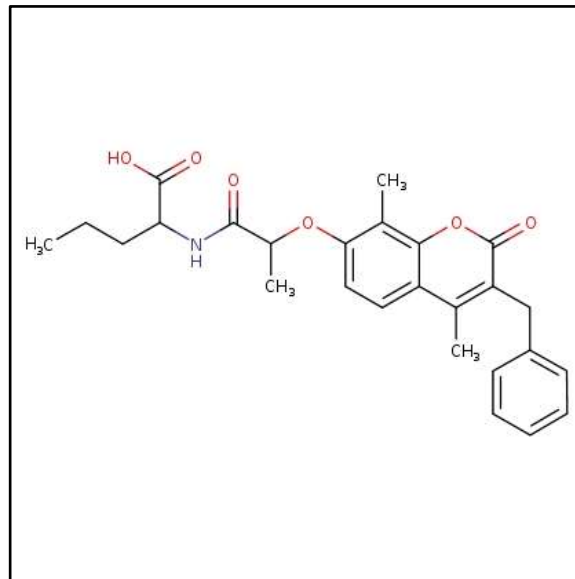


Figure 3: Structure of Baptisine.

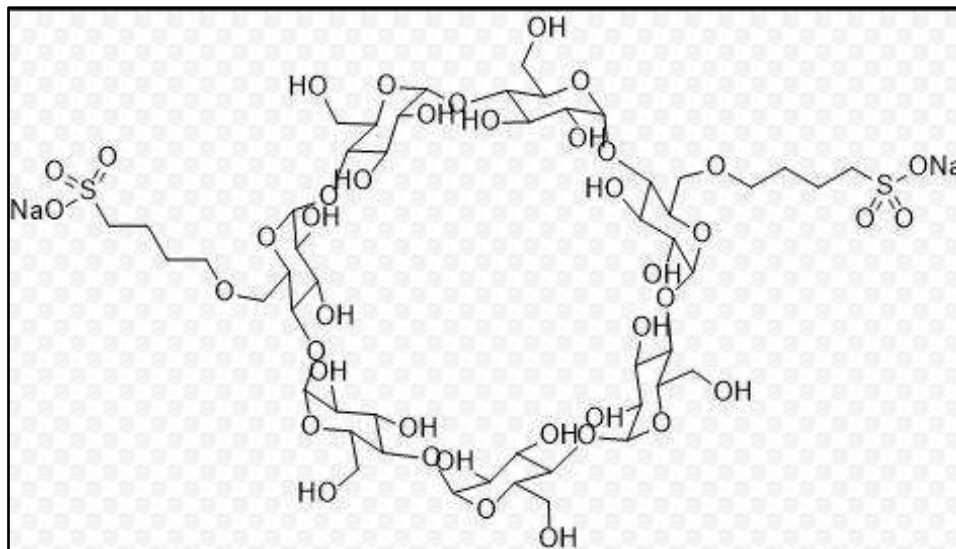


Figure 4: Structure of Baptisol.

Medicinal Uses

Anywhere that infection is a concern, wild indigo is a herb worth taking into consideration. The body's natural defenses against infection are strengthened and encouraged by this treatment. It works particularly well for treating infections and catarrh in the throat, nose, and ears. It may be used for laryngitis, pharyngitis, tonsillitis, and catarrhal infections of the nose and sinus. Used internally it may be helpful in the treatment of enlarged and inflamed lymph glands and also to reduce fevers. Externally an ointment will help infected ulcers. Depending on the symptoms, typhoid is treated with baptism in addition to a number of other medications.

Serial number	Part of the plant	Ethnopharmacological/economical application
1	Root	Antibacterial
2	Root	Skin disease and jaundice
3	Root	Diarrhea and intestinal parasitic infections
4	Root	Antibacterial and antifungal activity
5	Leaves	Hepatoprotective and antioxidants
6	Leaves	Natural mosquito coil
7	Leaves	Snakebite and indigestion
8	Fruit	Jams and jellies
9	Fruit	Antidiabetic
10	Root, young shoot	Jaundice

Figure 5: Parts of the plant and their uses

Dosage

Since it's a pretty potent medication, I usually don't take it by itself. I would administer approximately 2.5 milliliters of a tincture containing equal amounts of Baptisia, Ligusticum, Eupatorium perfoliatum, and Echinacea to an adult suffering from the flu. (a half a teaspoon, or about 2 full 1 oz droppers), every 2-3 hours the first day. As symptoms abated, I might use a bit less every 4 hours. As the condition improves lowers both quantity and frequency. In these situations, you might want to also start mixing in other medicines such as anti-inflammatories, decongestants, cough and sore throat remedies, pain relievers, and other medicines.

Conclusion

Consequently, this study demonstrates that baptism, either by itself or in conjunction with other medications, is a highly effective ultradilute anti-typhoid medication. It works by emulating the Salmonella immune response that results in illnesses such as typhoid by generating endogenous antibodies in the absence of a Salmonella infection. Thus this novel finding suggests that Baptisia can be used for the prevention as well as the cure of the disease. Further study in this respect may help to develop potent vaccines against typhoid.

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