

False Indigo



False Indigo (*Amorpha fruticosa*)

General Description

Native legume to North Dakota and throughout the Great Plains east to New England and south to the Gulf States. This plant has been cultivated since 1724 and grows well in moist soils. Subject to periodic dieback and regrowth which may be accentuated by drought. Similar to a sub-shrub.

Leaves and Buds

Bud Arrangement - Alternate.

Bud Color - Brownish-gray.

Bud Size - 1/8 inch long.

Leaf Type and Shape - Pinnately-compound, 13 to 33 narrow leaflets, rounded on the ends, mucronate.

Leaf Margins - Entire, no serrations.

Leaf Surface - Finely-pubescent to smooth.

Leaf Length - 6 to 12 inches; leaflet 1 to 1½ inches.

Leaf Width - 2 to 3 inches; leaflet 1/3 to 3/4 inch.

Leaf Color - Dark green; yellow fall color.

Flowers and Fruits

Flower Type - Clustered spikes, 3 to 6 inches long.

Flower Color - Bluish-purple.

Fruit Type - Curved pods, 1/4 to 3/8 inch long, ripen in August.

Fruit Color - Light green, becoming dark brown.

Form

Growth Habit - Upright shrub with most foliage on upper 1/3 of the plant. Plants can spread by layering.

Texture - Medium-fine, summer; medium-coarse, winter.

Crown Height - 8 to 12 feet.

Crown Width - 6 to 10 feet.

Bark Color - Brownish-gray.

Root System - Fibrous, spreading, holds soil from erosion, especially on sandy sites.

Environmental Requirements

Soil

Soil Texture - Adapted to a variety of soils.

Soil pH - 5.0 to 8.0.

Windbreak Suitability Group - 1, 1K, 2, 3, 4, 4C, 5.

Cold Hardiness

USDA Zone 3.

Water

Prefers above average moisture conditions.

Light

Full sun or light shade.

Uses

Conservation/Windbreaks

Conservation plantings along stream banks for erosion control. Often short-lived, especially if droughty.

Wildlife

Dense shrub form provides cover to many wildlife species near wetland and riparian areas.

Agroforestry Products

No known products.

Urban/Recreational

Limited uses in landscape, parks and other public areas.

Cultivated Varieties

None.

Related Species

Dwarf False Indigo (*Amorpha nana*)

Lead Plant (*A. canescens*)

Pests

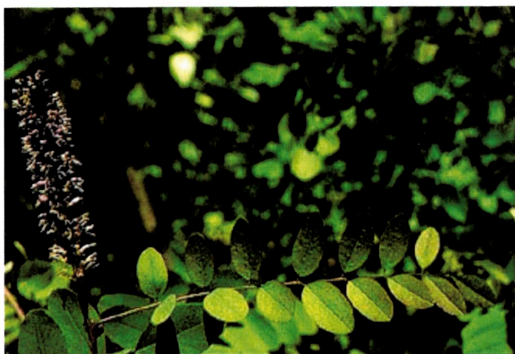
Diseases include rust, leaf spot, powdery mildew and twig canker. There are a few gall insect pests. Extracts of *Amorpha* species are toxic to various insect pests.

DESERT FALSE INDIGO

Amorpha fruticosa L.

Plant Symbol = AMFR

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Alternate Names

River-locust, false indigo, indigobush amorpha, indigobush

Uses

Ethnobotanic: Resinous pustules on the plant contain amorpha, a contact and stomachic insecticide that also acts as an insect repellent (Huxley 1992). Desert false indigo also contains some indigo pigment that can be used to make blue dye.

Landscape: *Amorpha fruticosa* is an exotic species that is often planted as an ornamental. This shrub has an extensive root system and is also fairly wind tolerant; it can be planted as a windbreak and also to prevent soil erosion (Huxley 1992). According to Dayton, the early settlers used this shrub as a substitute for true indigo (McMinn 1939).

Status

Please consult the Plants Web site and your State Department of Natural Resources for this plant's current status, such as, state noxious status, and wetland indicator values.

Description

General: Bean family (Fabaceae). Desert false indigo is a native, deciduous shrub growing between three to ten feet high. The leaves are four to eight inches long, with eleven to twenty-five leaflets, ovate to oblong. This species is highly variable as regards to shape of the leaf and pubescence (The Great Plains Flora Association 1986). The scented flowers are purplish blue with orange anthers and occur in three to six inch long upright spikes in June (Dirr 1997). The fruits are short, smooth or hairy, glandular legumes containing a single smooth brownish seed (Freeman & Schofield 1991).

Distribution: Desert false indigo occurs in the foothills of the San Bernardino and San Jacinto mountains southward in the lower mountain valleys of San Diego county in the upper Sonoran Life Zone (McMinn 1939). It extends southward to Lower California and eastward to Texas and the Atlantic Coast. This species is also found from Connecticut to Minnesota, south to Florida and Louisiana (Dirr 1997). For current distribution, please consult the Plant profile page for this species on the PLANTS Web site.

Adaptation

Amorpha fruticosa is commonly found on wet ground along rivers, streams, ponds, and ditches and occasionally in open wet woods (Freeman & Schofield 1991). It requires well-drained soil and can grow in nutritionally rich soil. This plant prefers acid, neutral or basic soils. It is adaptable to infertile, dry and sandy soils. Once planted, it remains for life (Dirr 1997). Utilize in dry soil and full sun where precious few plants will prosper.

Establishment

Propagation by Seed: *Amorpha fruticosa* seeds should be presoaked for twelve hours in warm water and sown in the early spring in a greenhouse. The seeds normally germinate at 20°C in one to two months. When the seedlings are large enough to handle place them into individual pots and grow them in the greenhouse for their first winter. Plant them in their permanent position in the late spring or early summer.

Management

Desert false indigo has a symbiotic relationship with certain soil bacteria. These bacteria form nodules on the roots and fix atmospheric nitrogen. The growing

plant utilizes some of this nitrogen but other plants growing nearby can also use some (Huxley 1992).

Cultivars, Improved and Selected Materials (and area of origin)

Materials are available through native plant seed sources within its range.

References

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