

Missouri Covey Germplasm False Indigo Bush

The Natural Resources Conservation Service (NRCS), U.S. Department of Agriculture has announced the release of a selected ecotype of false indigo bush (*Amorpha fruticosa*, L.) for the state of Missouri. Missouri Covey Germplasm False Indigo Bush release was made in 2005.

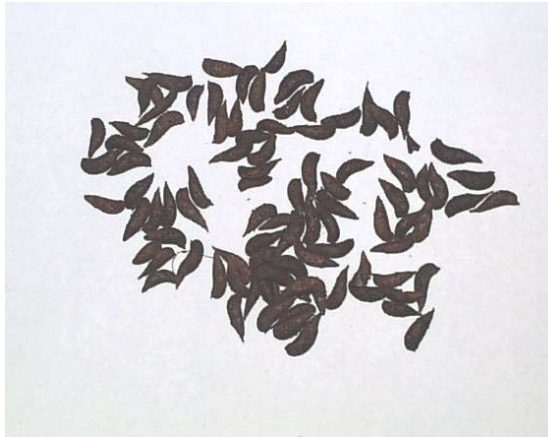
Amorpha fruticosa L., false indigo bush, is a native woody leguminous shrub. It is found in more open areas along lakes and streams and may also be found in upland areas where additional moisture is received. *Amorpha* is an important species providing wildlife cover and is also suitable for environmental plantings because of its handsome foliage and flowers.

Missouri Covey Germplasm False Indigo Bush was collected from counties in the state of Missouri and is being made available through the USDA Plant Materials Program. In addition to being used for wildlife cover, it can also be used to enhance wetland riparian areas. A primary use will be in a covey headquarter mix on upland sites. A covey headquarter planting is a small vegetative wildlife cover site, approximately 1500 square feet. False indigo bush will address erosion control along fluctuating shorelines, streams, and wetlands.

Description

False indigo bush, *Amorpha fruticosa* L., is a native legume that has growth form like a medium sized shrub up to a maximum height of 18 feet. The general shape is an open canopy with the bulk of foliage and twigs in the upper 1/3 of the crown. The leaves are alternate, pinnately compound, 4 to 8 inches long, with 15 to 25 leaflets. Each leaflet is up to two inches long and just over one inch wide with a small, bristle-like point with rounded tip. The bright green foliage is attractive and the finely divided compound leaves add a soft texture to the plant. The flowers are in dense spikes on the upper part of the plant, often several spikes clustered

together. Each flower has dark indigo-purple petals with yellow-tipped stamens. The flowers are scented and occur in 3 to 6 inch long upright spikes. Flowering time: late spring to mid-summer. False indigo is long-lived on adapted sites and regenerates from seed or branch layering. Twigs are rigid, glabrous, red-brown or gray, often with an insect caused, long swelling near the tip. The fruit is a small, warty kidney shaped pod (1/2 inch long), with large glandular dots, in a crowded cylindrical cluster. The fruit persist on the shrub through winter.



Adaptation

False indigo bush occurs in moist prairie thickets and along streams and rivers in prairies throughout the tallgrass region. This native legume is found as far North as New Jersey and Minnesota, down to the Mexican border and does well throughout the U. S. False indigo bush likes full sun or light shade and thrives in moist soils that are poorly drained. It also performs well on silt loams to dry sands.

Ecological Considerations

Missouri Covey Germplasm is a selected release of naturally occurring false indigo. It does not differ significantly in rate of spread or seed production from naturally occurring false indigo. Missouri

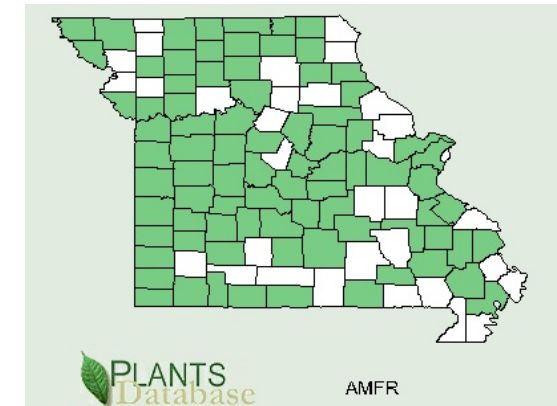
Covey Germplasm was documented as “OK to Release” when rated through the worksheet for “Environmental Evaluation of Plant Materials Releases”.

Evaluation and Performance

The Missouri source has been limited in seed production, hence three field plantings have been established for direct seeding since 2004. Evaluations are limited to these plantings; however, survival of the direct seedlings have been fair with an average 8-10 inches in height by the end of the second growing season. The bare root seedlings have good survivability and an average 24” height after the second growing season and also good survivability in drought conditions in 2005.

There is good deer resistance and no damage to seedlings during the growing season from heavy deer pressure.

Missouri Covey Germplasm False Indigo Bush is Native to Missouri



Documented Occurrences in Green

Area of Intended Use of Missouri Covey Germplasm False Indigo Bush

Missouri Covey Germplasm False Indigo Bush originated from eight collections harvested in counties within the state of Missouri. Area of

intended use is primarily Missouri. These counties serve both the geographic area represented by the genetic material of the parent seed and the potential market of the end product, which is commercially available as a selected release.

Establishment

Establishing covey headquarters for wildlife plantings can be attained by using false indigo bush seed, bareroot or container plants. False indigo can be added to a “covey headquarter” seeding mix. A covey headquarter seeding is best drilled but can be broadcast and harrowed in an area (1500 sq. ft., 50’ x 30’) where the soil has been disturbed or exposed by mechanical preparation for a seedbed. A recommended seeding rate for false indigo is 15#PLS/acre; this amounts to 0.5# PLS for 1500 sq. ft. (0.03 of an acre) for a covey headquarter. For more information regarding covey headquarter establishment see the brochure listed on the website referred to on the last page. Select “Elsberry Center” then “Publications”.

Management

During establishment year use a selective grass post emergence application herbicide for control of annual and perennial grasses. For container plants reduce weed competition by mowing or weeding around the base to reduce any shading for the establishing plants.

False indigo bush often has an insect gall form on the stem just below the foliage. It can be pruned off while the tree is dormant. Spraying with imidacloprid (Merit) will also help prevent future insect damage from occurring.

Availability

Release of Missouri Covey Germplasm False Indigo Bush has been allocated to Missouri seed growers by the USDA-NRCS. Small quantities of seed will be available from the Elsberry Plant

Materials Center to establish covey headquarter and wildlife plantings.



For More Information

Visit our Plant Materials website at <http://Plant-Materials.nrcs.usda.gov> to find more information on solving conservation problems using plants.

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April 2006

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Missouri Covey Germplasm False Indigo Bush (*Amorpha fruticosa*)



An Improved Conservation Plant Developed by Elsberry Plant Materials Center Elsberry, Missouri