

**A Conservation Plant Released by The Natural Resources Conservation Service
Elsberry Plant Materials Center, Elsberry, Missouri**

MISSOURI COVEY GERMPLASM

false indigo bush

Amorpha fruticosa L.

Missouri Covey Germplasm is a selected ecotype false indigo bush released by the USDA-NRCS Elsberry Plant Materials Center (PMC) in 2005.

Description

Missouri Covey Germplasm false indigo bush is a native legume shrub with attractive bright green foliage in an open canopy that grows up to 10 feet tall. The bulk of foliage and branches are in the upper 1/3 of the crown. The finely divided leaves are alternate, pinnately compound, four- to eight-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 at the rounded tip. The flowers are scented and occur in three- to six-inch long upright spikes on the upper part of the plant, often with several spikes clustered together. Each flower has dark indigo-purple petals with yellow-tipped stamens. False indigo bush flowers in late spring to mid-summer. False indigo bush is long-lived on adapted sites and regenerates from seed or branch layering. Twigs are smooth, rigid, and red-brown or gray. The fruit is a bumpy, ½ inch long, kidney-shaped pod, with large glandular dots, in a crowded cylindrical cluster. The fruit can persist on the shrub through winter.

Source

Missouri Covey Germplasm false indigo bush originated from eight collections harvested in the late fall and early winter of 2000, in seven counties within the state of Missouri: Audrain, Marion, Knox, Chariton, Lincoln, Pettis, and two collections from Pike. The collections were increased vegetatively in the greenhouse. On June 21, 2001, these were planted into an evaluation block with four replications of four plants per collection in each replication. Each plant was evaluated for plant vigor, height, spread, insect and disease resistance and seed production. The final evaluation before release was conducted on July 15, 2003.

Conservation Uses

Missouri Covey Germplasm false indigo bush is primarily intended for use in covey headquarter mixes on upland sites. A covey headquarter planting is a small vegetative wildlife cover site, approximately 1,500 ft². In addition to wildlife cover, Missouri Covey Germplasm false indigo bush can also be used to enhance wetland riparian areas by addressing erosion along fluctuating streambanks and wetland shorelines.

Area of Adaptation and Use

Missouri Covey Germplasm false indigo bush was collected from Major Land Resource Areas 109, 112, 113, 115B, and 115C. False indigo bush occurs in moist prairie thickets and along streams, rivers, and lakes in prairies throughout the tallgrass region. This native legume is found as far North as New Jersey and Minnesota, and as far south as the Mexican border. It thrives in moist soils that are poorly drained, but also performs well on silt loams to dry sands. False indigo bush prefers full sun but will tolerate light shade.



Figure 1. False indigo bush planting in flower.

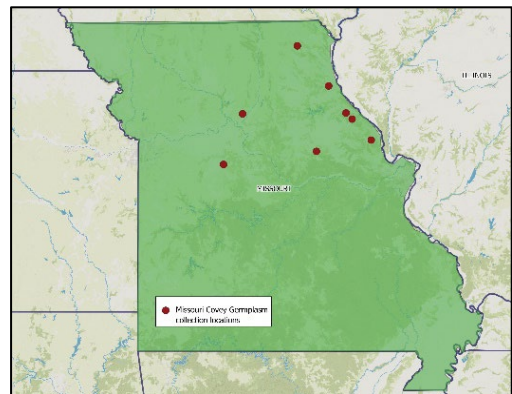


Figure 2. Missouri Covey Germplasm false indigo bush originated from collections taken from seven Missouri counties.

Establishment and Management for Conservation Plantings

Wildlife plantings can be established using seed, bareroot, or container plants. Missouri Covey Germplasm false indigo bush can be added to a covey headquarter seeding mix, which is best drilled but can be broadcast and harrowed in an area (1500 ft²; 50 ft. x 30 ft.) where the soil has been disturbed or exposed by mechanical preparation for a seedbed. A recommended seeding rate for Missouri Covey Germplasm false indigo is 15 lb. pure live seed (PLS) per acre, or 0.5 lb. PLS for 1500 sq. ft. (0.03 of an acre) for a covey headquarter. During establishment year, apply a selective grass post-emergence herbicide for control of annual and perennial grasses. For container plants, reduce weed competition by mowing or weeding around the base of establishing plants to reduce shading.

Ecological Considerations

Missouri Covey Germplasm false indigo bush is a composite of naturally occurring false indigo bush and does not differ significantly in rate of spread or seed production from naturally occurring false indigo bush. An environmental evaluation did not indicate any issues with spreading outside of its intended area of conservation use. 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. Systemic insecticides have helped prevent future insect damage from occurring at the Elsberry PMC.

Seed and Plant Production

Missouri Covey Germplasm false indigo bush can also be seeded in rows (12 to 15 feet apart) at a rate of 9 to 12 PLS per linear foot (0.6 to 0.8 lbs. per acre). One pound of Missouri Covey Germplasm false indigo contains 72,200 seeds. The soil will need to be prepared by disking and harrowing or using chemical weed control for direct seeding. The seedbed should be firmed after tillage by using a cultipacker or roller. The seed should be planted at least ¼ to ½ inch deep. Missouri Covey Germplasm false indigo bush can be direct seeded with a no-till drill or Brillion seeder to ensure good seed to soil contact. Once the seedlings emerge, they should be thinned or spaced out 5 to 8 feet apart within the row to allow for proper growth. This spacing can be achieved by mowing or clipping the trees when they are still in the sapling stage. Missouri Covey Germplasm false indigo bush can also be established using container grown plants. Start plants in germinating trays and transplant to containers filled with standard nursery potting soil. Potted Missouri Covey Germplasm false indigo bush should be at least 8 to 10 inches tall before transplanting to the field. The planting area should have minimal competing vegetation to ensure the best chance for survival. Plants should be spaced 5 to 8 feet apart within the rows 12 to 15 feet apart.

Availability

For conservation use: Missouri Covey Germplasm false indigo bush is commercially available from Missouri seed growers.

For seed or plant increase: G1 material is being produced in limited supply by the Elsberry Plant Materials Center. Contact for availability.

For More Information

Elsberry PMC, 2803 North Hwy 79

Elsberry, Missouri 63343

Phone # 573-898-2012

Website: <https://www.nrcs.usda.gov/plant-materials/mopmc>



Citation

Release Brochure for Missouri Covey Germplasm false indigo bush (*Amorpha fruticosa* L.). 2025. USDA-Natural Resources Conservation Service, Elsberry Plant Materials Center. Elsberry, Missouri.

For additional information about this and other plants, please contact your local USDA Service Center, NRCS field office, or Conservation District <<http://www.nrcs.usda.gov/>>, and visit the PLANTS Web site <<http://plants.usda.gov/>> or the Plant Materials Program Web site <<http://www.plant-materials.nrcs.usda.gov/>>

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