

UNITED STATES DEPARTMENT OF AGRICULTURE  
NATURAL RESOURCES CONSERVATION SERVICE  
ELSBERRY, MISSOURI

**NOTICE OF RELEASE OF MISSOURI COVEY FALSE INDIGO BUSH  
SELECTED CLASS OF NATURAL GERMPLASM**

The Natural Resources Conservation Service (NRCS), U.S. Department of Agriculture announce the release of a selected ecotype of false indigo bush (*Amorpha fruticosa*, L.) for the state of Missouri.

As a selected release, this plant will be referred to as Missouri Covey Germplasm false indigo bush. It has been assigned the NRCS accession number 9083248.

**Collection Site Information:** Collections of false indigo bush were taken from seven different counties in Missouri in the late fall and early winter of 2000. These seven collections were made in the counties of Audrain, Marion, Knox, Chariton, Lincoln, Pettis, and two from Pike.

**Description:** False indigo bush, *Amorpha fruticosa* L., is a medium sized shrub up to ten feet in height. 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. Each leaflet is up to two inches long and just over one inch wide with a small, bristly like point at the rounded tip. 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. Flowering time: late spring to mid-summer. 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. Found in more open areas along lakes and streams. May be found in upland areas where additional moisture is received.

**Method of Selection:** The seven different collections of false indigo bush from Missouri were increased vegetatively in the greenhouse. They were planted into an evaluation block with four replications and four plants per collection in each replication. Each plant was evaluated independently on plant vigor, height, spread, insect and disease resistance and seed production. The Missouri Covey Germplasm false indigo bush was planted in a randomized complete block with four replications. It was planted on June 21, 2001 and had its final evaluation before release on July 15, 2003.

**Ecological Considerations and Evaluation:** Missouri Covey Germplasm false indigo bush is a selection of naturally occurring germplasm and has undergone minimal purposeful selection. It does not differ in rate or spread, seed production, and vigor from naturally occurring false indigo bush. Missouri Covey Germplasm false indigo bush did not meet the assessment of a plant that could become invasive based on guidelines adopted by the NRCS Plant Materials Program. It is not expected to behave any differently in the environment than other native plant material.

Missouri Covey Germplasm false indigo bush was “okay to release” when evaluated through the “Worksheet for Conducting an Environmental Evaluation of Plant Materials Releases”.

**Anticipated Conservation Use:** The potential of Missouri Covey Germplasm false indigo bush is to establish wildlife food/cover and enhance wetland riparian areas. The primary use will be in a “covey headquarter” mix on upland sites. A covey headquarter planting is a small vegetative wildlife food and cover site, approximately 1500 sq. ft. False indigo bush will address erosion control along fluctuating shorelines, streams, and wetlands.

**Anticipated Area of Adaptation:** False indigo bush occurs in moist prairie thickets and along streams and rivers in prairies throughout the tallgrass region. False indigo bush is native from Connecticut to Minnesota, south to Louisiana and Florida.

**Availability of Plant Materials:** G1 material is being produced in limited supply by the Elsberry Plant Materials Center. For information contact USDA, NRCS, Plant Materials Center, 2803 N. Hwy 79, Elsberry, Missouri 63343 (573 898-2012).

**References:**

Seeds of Woody Plants in North America; pp. 30-31; Young & Young; Dioscorides Press; Portland, Oregon; 1992.

Flora of Missouri; p. 902; Steyermark; The Iowa State University Press; Ames, Iowa; 1968.

Tallgrass Prairie Wildflowers; p. 50; Ladd, D.; Falcon Press Publishing Co., Inc.; Helena and Billings, Montana; 1995.

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**Signatures for release of:**

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

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Roger A. Hansen  
State Conservationist  
United States Department of Agriculture  
Natural Resources Conservation Service  
Columbia, Missouri

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Date

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Director, Ecological Sciences Division  
United States Department of Agriculture  
Natural Resources Conservation Service  
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Date

**Release Documentation****Attachment #1**

		Rep 1	Rep 2	Rep 3	Rep 4	Rep Average
MO-1	height	3.18	2.80	3.60	1.70	2.82
	spread	3.23	2.53	3.75	0.98	2.62
	vigor	6.50	4.25	5.50	8.75	6.25
	seed					
	production	7.50	2.75	2.00	0.00	3.06
MO-3	height	2.75	2.90	2.90	2.60	2.79
	spread	3.55	3.53	4.20	3.25	3.63
	vigor	6.75	6.50	6.50	6.75	6.63
	seed					
	production	3.50	5.50	6.25	5.00	5.06
MO-4	height	4.23	3.43	3.23	3.75	3.66
	spread	3.68	2.18	2.25	4.08	3.04
	vigor	4.75	6.00	6.75	5.50	5.75
	seed					
	production	6.75	2.00	2.00	5.00	3.94
MO-5	height	3.88	3.50	3.50	4.03	3.73
	spread	3.65	3.30	3.15	3.20	3.33
	vigor	5.50	5.75	5.00	5.25	5.38
	seed					
	production	4.00	0.00	0.00	1.00	1.25
MO-6	height	2.78	3.58	2.98	2.73	3.01
	spread	2.60	2.63	2.10	2.00	2.33
	vigor	7.25	6.25	6.75	7.25	6.88
	seed					
	production	0.00	0.00	2.00	2.25	1.06
MO-7	height	3.53	3.80	3.50	3.68	3.63
	spread	3.08	2.33	3.05	3.28	2.93
	vigor	7.00	6.00	6.00	5.50	6.13
	seed					
	production	4.25	6.00	0.00	4.00	3.56
MO-8	height	2.93	2.63	2.85	3.18	2.89
	spread	4.15	2.40	2.48	4.05	3.27
	vigor	6.00	6.50	6.25	5.00	5.94
	seed					
	production	5.75	1.75	2.00	6.50	4.00

Height and spread are measured in feet

Vigor and seed production are rating based on a 1 – 10 scale; 1 – poor and 10 – best