

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

And

NATIONAL AUDUBON SOCIETY- AUDUBON MISSOURI
COLUMBIA, MISSOURI

MISSOURI DEPARTMENT OF CONSERVATION
JEFFERSON CITY, MISSOURI

**NOTICE OF RELEASE OF NORTHERN MISSOURI GERMPLASM
BLAZING STAR
SOURCE IDENTIFIED CLASS OF NATURAL GERMPLASM**

The Natural Resources conservation Service (NRCS), U.S. Department of Agriculture and the National Audubon Society-Audubon Missouri (NAS), and the Missouri Department of Conservation (MDC) announce the release of a source identified ecotype of blazing star (*Liatris pycnostachya*, Michx.) for Northern Missouri counties.

As a source identified release, this plant will be referred to as Northern Missouri Germplasm blazing star to document its original collections. Northern Missouri Germplasm blazing star is released as a source identified type of certified seed (natural track). It has been assigned the NRCS accession number 9079020.

This alternative release procedure is justified because there are no existing commercial sources of blazing star collected from numerous native sites throughout this specific region. Propagation material of specific ecotypes is needed for roadside plantings and prairie restoration and enhancement. The potential for immediate use is high.

Collection Site Information: Collections were taken from native prairie remnants within the counties in Missouri north of the Missouri River.

Ecotype Description:

Prairie blazing star is a hardy perennial, erect often resinous herb, simple or branched, and arising from a tuber. The narrow leaves on the lower two-thirds of the plant are so crowded that to the casual observer they may appear spiraled rather than closely alternate. Lower leaves are larger up to 4 inches long and ½ inch wide than those farther up the stem. Both the stem and leaves usually display short, stiff hairs. The top two-thirds of blazing star is a spike of rose-purple, thistle-like flowers that are given a somewhat fuzzy appearance by extended white stamen (male flower parts) and pistils (female flower parts). Flowering starts at the top of the spike and moves progressively downward. The oblong flower head has a mass of 5 to 12 tubular florets that somewhat resemble those of horsemint. A dense circle of bracts surrounds the base of each flower head. The tips of these long, pointed bracts tend to spread and curve back toward

their bases. Bracts of this species may have a purplish tinge. All produce flowers in wandlike spikes or racemes. Their flowers are produced in late summer and autumn. They multiply by offsets from their cormlike base, or may be grown from seed, which should be sown in autumn. They will grow and produce flowers in poorer soil than most garden plants, but thrive best in good, rich garden soil, and require no special care. *Pycnostachya* is one of the most conspicuous of the prairie inhabitants. Its leafy stem grows erect to a height of 5 feet. The most showy are *Liatris elegans* and *Liatris pycnostachya*. The slender seeds are usually less than ¼ inch long. The seed narrows toward the base and is tipped with a set of soft bristles about as long as the seed itself. Close examination of the seed shows 10 ribs or ridges.

Environmental Impact Assessment: Northern Missouri Germplasm prairie blazing star is a collection of naturally occurring germplasm and has been unaltered. Northern Missouri Germplasm did not meet the assessment of a plant, which could become invasive based on guidelines adopted by the NRCS Plant Materials Program.

Anticipated Conservation Use: The potential uses of Northern Missouri Germplasm prairie blazing star include roadside plantings, prairie creations and restorations, landscaping, and for increasing plant diversity in prairie communities.

Potential Area of Adaptation: Prairie blazing star occurs throughout the tallgrass prairie biome, often in thick stands on damp prairies and open bottomlands. Flowering begins in July and may continue until frost.

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:

Flora of Missouri; p. 1471; Steyemark, J. A.; Iowa State University Press, Ames, IA 1968.

Wildflowers of the Tall Grass Prairie, The Upper Midwest; p. 199; Runkel, Sylvan T, and Roosa, Dean M.; Iowa State University Press, Ames, IA 1989.

The Tallgrass Restoration Handbook; For Prairies, Savannas, and Woodlands; pp.24, 102, & 309; Packard, Steven and Mutel, Cornelia F.; Island Press, Washington, D. C. 1997.

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Signatures for release of:

Northern Missouri Germplasm blazing star (*Liatris pycnostachya*, Michx.)

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