

## Alexander Germplasm Showy Tick Trefoil

*Desmodium canadense* L., Alexander Germplasm showy tick trefoil is a native warm-season perennial legume.

The Alexander selection was one collection out of an assembly of 27 collections of showy tick trefoil planted on the plant materials center. After ten years of comparative evaluations, this accession was selected based on the following characteristics: ease of establishment, seedling vigor, resistance to lodging, effectiveness of ground cover, quantity of seed production, and insect and disease resistance.

The USDA Natural Resources Conservation Service (NRCS), U.S. Department of Agriculture has announced the 1997 selected release of Alexander showy tick trefoil (*Desmodium canadense* L.) for use in Midwestern states.



Young Seedling

## Description

Tick trefoil is a tall (1.3m), open pollinated, native perennial warm-season legume; one to three leaflets, usually 3-8 times as long as broad, mostly linear lanceolate to lanceolate; lower surface of leaflets with hairs, when present usually opened (lying parallel to the surface pressed against it); stems nearly glabrous (without hairs); leaves clover-like (3 long-oval leaflets); flowers small and papilionaceous, terminal or axillary racemes in summer, mostly purple; blossoms (1/2in.) in clusters at the summit of a hairy, leafy stem; calyx with a short tube, more or less two-lipped; wings joined to the knee; pod flat, deeply lobed or jointed, joints often breaking apart and adhering to clothing and to animals by means of small hooked hairs; fruit has 3 or more segments; calyx 3mm long or longer; *Desmodium canadense* differs from *Desmodium illinoense* by having a branched inflorescence with larger flowers that are rose-purple and change to blue with age. Other common names for tick trefoil are stick tights and beggar's lice.

## Adaptation

Tick trefoil occurs in prairies, wet meadows in valleys, along spring branches, and open thickets. It ranges from Quebec to North Dakota and Saskatchewan, south to Virginia, West Virginia, Ohio, Indiana, Illinois, Missouri, and Oklahoma.



## Known Distribution

This map shows the adaptation of switchgrass

## Area of Intended Use

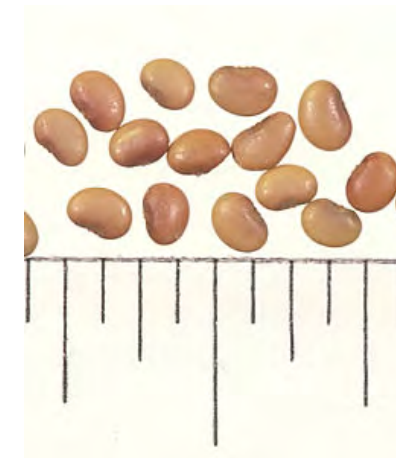
The area of intended use for Alexander Germplasm Showy Tick Trefoil is the three state service area of Missouri, Iowa, and Illinois. The focus use is for wildlife food and cover.



Leaves are alternate along the stem and divided into three leaflets

## Evaluation and Performance

From 2003 to 2006, 15 field plantings were applied with 5 in Missouri, 4 in Illinois, and 6 in Iowa. The survival in all three states were 100% with a stand average of fair to good. The vigor rating average was good to excellent. The typical soils tested were silt loam, silty clay loams, and clay loams.



Alexander Germplasm Showy Tick Trefoil Seed

Scale= 1/16 inch increments

## Establishment

Optimum seeding time is in the spring but can be winter dormant planted in late fall and winter. Prepare a clean weed-free seedbed by disking and harrowing or using chemical weed control. When establishing a planting of tick trefoil use scarified, inoculated seed if possible. Seed should be placed at a depth of not more than 1/4 inch in a firm seedbed. A billion seeder works well in the seeding operation, although other types of seeders or drills may be used.

There are 88,000 seeds per pound of tick trefoil.

## Seeding Rate (Conservation Use)

For most applications, showy tick trefoil is planted in a mixture with other native forbs, grasses and legumes. Showy tick trefoil generally makes up less than 10 percent of a mixture. The seeding rate can vary from as little as 0.5 pound PLS (pure live seed) per acre to 1.0 pound PLS per acre. As a single species, base seeding rate for Showy tick trefoil is 10 pounds PLS per acre when establishing wildlife food and cover plantings.

## Seeding Rate (Seed Production)

The seeding rate for seed production should be about 20 pure live seeds per row foot in 36 inch rows which is 3.3 pounds PLS per acre. For solid stand production, drill 10 pounds per acre to maintain 20 pounds PLS per square foot.

## Management

Reduce weed competition by mowing or using approved herbicides. For grassy weed control use a selective grass herbicide and follow label recommendations as herbicide weed control will encourage a good stand. (Note; some herbicide products may not be registered for this legume species in your state.) Burning may be appropriate where plant vigor declines or where invader species threaten stand.

## Availability

Foundation seed is being produced in limited supply by the Elsberry Plant Materials Center.



Production Field

## 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.

USDA-NRCS  
Elsberry Plant Materials Center  
2803 N. Highway # 79  
Elsberry, Missouri 63343

Phone: (573) 898-2012

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**Alexander Germplasm**  
**Showy Tick Trefoil**  
*Desmodium canadense L.*

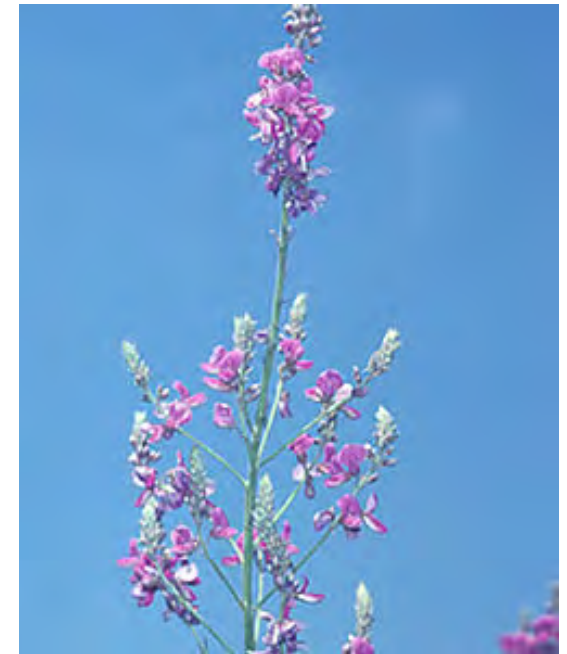


Photo by Don Kurz

**An Improved**  
**Conservation Plant**  
**Developed By**

**Elsberry**  
**Plant Materials Center**  
**Elsberry, Missouri**