

Tech Note

Identification and Treatment of Sericea Lespedeza

By RosaLee Walker, Private Lands Biologist



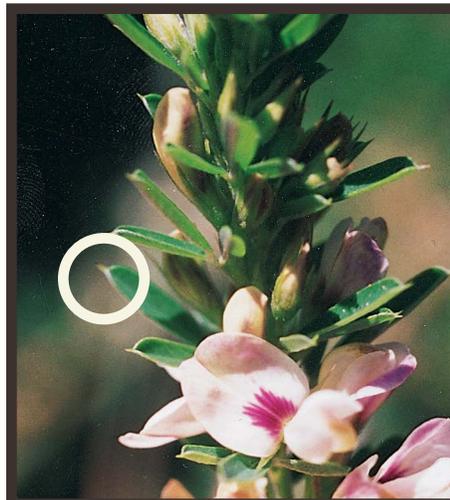
Native to eastern Asia and first introduced to the United States in 1896, sericea lespedeza has become a source of irritation for many land-

owners. Though brought to the U.S. with good intentions – chiefly for erosion control, livestock forage and wildlife cover – it has instead blanketed the eastern half of the country; causing more headaches than offering solutions.

A perennial legume that actively grows when temperatures are 80-95 degrees, sericea lespedeza seems a good match for Oklahoma – at least on paper. While it can quickly cover bare ground and prevent erosion, it outcompetes surrounding vegetation without increasing the soil's nitrogen content like other legumes. It can provide livestock forage, but only when plants are young. Once the plant grows to 12 inches, the stems become too woody for livestock. It can provide limited cover for wildlife, but its seeds (all 1,000 per stem) are too small and lacking in nutrition to be of value.

Early detection and treatment of this invasive plant is the best prevention. Here are a few tips for spotting sericea and distinguishing it from the beneficial slender lespedeza.

Sericea Lespedeza (*Lespedeza cuneata*) (Non-Native, Invasive)

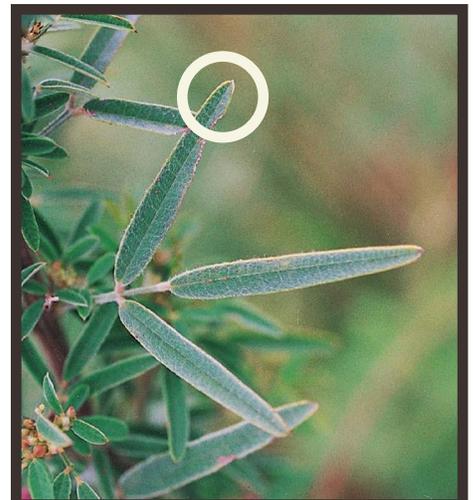


Leaves are squared with a "pin" at the tip.



Flowers bloom from July to October and are yellow-cream with purple throats

Slender Lespedeza (*Lespedeza virginica*) (Native)



Leaves are narrow and rounded and do not have a "pin" at the tip.



Flowers bloom from May to October are purple to pink.

Photos courtesy of [The Samuel Roberts Noble Foundation](#), Ardmore, Okla.

Sericea lespedeza has become such a problem across the Great Plains that agencies and organizations in Kansas, Nebraska, Iowa, Missouri and Oklahoma have formed a partnership to manage and control sericea throughout the prairie region. This [Sericea Lespedeza Multi-State Working Group](#) has compiled research findings and proposes the following schedule to control the invasive sericea.

1. Prepare for a prescribed burn.

Grazing with light to moderate stocking rates to increase the amount of grass available to carry a dormant season fire.

2.) Burn infested areas in the spring. A fire will encourage germination of sericea seeds, remove new growth, and remove all of last season's growth. This burn may increase sericea densities, but will make the plants more vulnerable to future herbicide treatment.

3.) Intensively graze the infested area. After the fire, sericea seeds will germinate and the young, tender plants will be more palatable to cattle and other grazers. Double stock cattle for half the season. Remove cattle by July 15.



The Nature Conservancy of Oklahoma

Dense stands of sericea lespedeza are common across the state. Sericea is best combated with a combination of prescribed grazing and burning, and herbicide treatment.

4.) Apply herbicide. Broadcast or spot-spray herbicide 4 to 6 weeks after grazing ends (ideally between July-September). Herbicide's with tryclopyr or fluroxypr as active ingredients seem to be most effective.

5.) Reapply herbicide. Broadcast or spot-spray herbicide in September to stubborn or missed areas.

6.) Exclude livestock. During September and October, remove cattle or other livestock to prevent seed spread.

7.) Spot spray. Sericea seeds can remain viable for more than 20

years. Spot spray as needed.

Other Control Considerations

- **Mowing.** Mowing up to three months before an herbicide treatment can increase spraying efficiency. Plants are most vulnerable to mowing during the growing season when they are building up root reserves for next year's growth.
- **Summer Burns.** Burning in the summer may weaken the plants and destroy newly developed seeds. Fewer seeds this year can mean lower densities next year.

Chemical Treatment Options for Sericea Lespedeza			
Herbicide	Method		Timing
	Spot Spray	Broadcast	
Remedy [®] Active Ingredient: Triclopyr	1.33 fl. oz. / gal.	1 - 2 pts. / ac.	Use during active vegetative growth (June - mid-July).
PastureGard [®] Active Ingredients: Triclopyr and Fluroxypyr	1 fl. oz. / gal.	1.5 - 2 pts. / ac.	Use lower rate in spring to early summer prior to bloom when plants are 12-15" tall. Use higher rate for dense stands or later stages of growth.
Cimarron [®] Active Ingredients: Metsulfuron Methyl and Chlorsulfuron		0.625 oz. / ac. Plus non-ionic surfactant	Apply from beginning of flower bud initiation to full bloom state (mid-July on).

From [Noble.org](#) and [Kansas State University](#)