NOXIOUS WEEDS ARE EVERYONE'S CONCERN

Noxious weeds compete with pastures and crops, reducing yields substantially. Some noxious weeds are directly poisonous or injurious to man, livestock and wildlife. The losses resulting from noxious weed infestations can be staggering, costing residents of Nebraska millions of dollars due to production losses. This not only directly affects the landowner, but erodes the tax base for all residents in the State of Nebraska.

The business of noxious weed control is everyone's concern, and noxious weed control benefits everyone. The support of all individuals within the state is needed and vital for the control of noxious weeds within Nebraska. It is the duty of each person who owns land to effectively control noxious weeds on their land.

If you have questions or concerns about noxious weeds, please contact your local county noxious weed control authority or the Nebraska Department of Agriculture.

Material derived from *Weeds of the Great Plains*, published by the Nebraska Department of Agriculture.

For more information, visit **nda.nebraska.gov**.

SERICEA LESPEDEZA

NEBRASKA NOXIOUS WEED

PREPARED BY THE
NEBRASKA DEPARTMENT OF AGRICULTURE
AND THE
NEBRASKA WEED CONTROL ASSOCIATION

SERICEA LESPEDEZA FACTS

Common Name: Sericea lespedeza (sericea, Chinese lespedeza, Chinese bushclover)

Growth Form: Forb

Life Span: Perennial

Origin: Asia

Flowering Dates: July–October

Reproduction: Seeds

Height: 0.5–2 m (1.6–6.6 ft)

Inflorescences: Clusters of 2–4 (usually 2) flowers, sometimes solitary, axillary

Flowers: White or cream to yellowish-white corollas, marked with purple or pink along the veins of the banner petals (6–9 mm long); wings and keels equal, shorter than the banners; calyx tube silky (0.5–1 mm long), teeth 5; teeth lance-subulate (3–5 mm long)

Fruits: Pods, oval (2.5–3.5 mm long), glabrate or with appressed pubescence; seeds 1

Seeds: Ellipsoid to ovoid (1.5–2.5 mm long), slightly flattened, brown to olive, often mottled

Leaves: Alternate; blades pinnately 3-foliate; leaflets cuneate (1–2.5 cm long), erect or ascending, tips round to flat with a mucro, upper surfaces without hair to pubescent, lower surfaces pubescent; stipules setaceous (3–12 mm long); petioles reduced upward (1–5 mm long)

Stems: Erect; branches numerous, straight, slender, grooved, pubescent in lines on ridges; mature stems somewhat woody with small bristles or spines

Underground: Taproot

Where Found: Southeastern Great Plains in well-drained soils of prairies, grasslands, abandoned fields, roadsides, open woods, and waste places. (NE, KS, OK, TX, MN, IA & MO)

Uses and Values: Forage quality of sericea lespedeza is low. Foliage is eaten by deer, rabbits, and wild turkeys. Seeds are eaten by quail and other birds.

Poisoning: It contains relatively high levels of condensed tannins (proanthocyanidins) which reduce forage digestibility and animal performance.

Historical: It was introduced into the southern United States for forage in the 1800s, and it is still grown for hay in that region.

Other: Sericea lespedeza is highly competitive and is a serious weed that is difficult to control in prairies and other grasslands. Seeds remain viable in the soil for more than 20 years.

IMPACT OF SERICEA LESPEDEZA

Sericea lespedeza is mainly found in southeast and south-central Nebraska, though it has the potential to invade range and grasslands statewide. Sericea lespedeza is found in pastures, CRP lands, hayfields, roadsides and waste areas. It is a hearty forb reproducing by seeds.

The first herbarium record shows that sericea lespedeza was first collected in Richardson County in 1974. The reason for introduction is unknown, but has been promoted in other states for wildlife habitat, used as a hay crop in the southern United States or from contaminated seed or hay.

Sericea lespedeza competes with native grasses, thus reducing the carrying capacity of forage animals.

Flowers are white or cream to yellowish-white, and the veins of the banner petal are marked with dark purple or pink.

CONTROLLING SERICEA LESPEDEZA

Mechanical and Cultural Control

Prescribed burning at the proper time (late spring) followed by intensive, early grazing may reduce the occurrence of sericea lespedeza. Mature cattle grazing early in the season are more apt to utilize sericea lespedeza. Proper fertilization and grazing during April and May may reduce the occurrence. Late grazing or no grazing will increase sericea lespedeza. Grazing infested areas with sheep and goats may provide some control of sericea lespedeza. Mowing in late bud stage for 2 to 3 consecutive years from mid-July to late summer may reduce the vigor of the stand. This activity also reduces grass competition which is critical for maintaining healthy grasslands and providing competition for sericea lespedeza and other invasive weeds. Areas infested with sericea lespedeza should never be hayed as this will aid in the spread as hay is moved or transported.

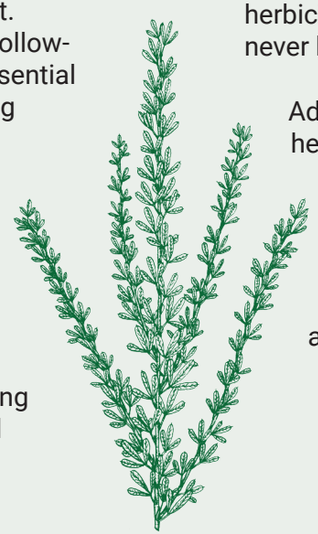
Infested areas require constant follow-up treatment to control escaped plants and to reduce the seed bank. Seeds remain viable in the soil for 20 years.

Biological Control

Currently, there are not any approved biocontrol agents for the control of sericea lespedeza.

Sericea Lespedeza Control Summary

A combination of two or more control methods is the best approach when controlling sericea lespedeza. By utilizing several control options, your odds become greater that more plants will be controlled. Existing infestations spread rapidly through seed dispersal. Seeds can be carried by wildlife, livestock, contaminated hay, vehicles and equipment. Continued monitoring and follow-up control measures are essential for maintaining and reducing infestations. Vigilance is necessary to identify new infestations and effectively control them when the patches are small and there is a possibility of total control. A follow-up program is necessary for several growing seasons to control escaped plants and new seedlings.



Herbicide Control

The use of herbicides can be an effective tool to assist in controlling noxious weeds. A person needs to identify the problem and the appropriate herbicide for the plant as well as the site that the plant is growing. If the noxious weed infestation is severe and scattered across a large area, then a broadcast application may be warranted. However, if the noxious weeds are in patches or a few scattered plants here and there, a person may be able to spot treat individual plants or patches. This approach requires less herbicide and has minimal impact on native plants and the environment. Controlling noxious weeds with herbicides in only one tool and should never be the only control option.

Additional information regarding herbicide use can be found through the Nebraska Cooperative Extension EC130 (*Guide for Weed, Disease, and Insect Management in Nebraska*) or your local county weed control authority at **neweed.org**.