## Sericea Lespedeza Control Options

## **AGRI-VIEWS**

by Chuck Otte, Geary County Extension Agent

Sericea lespedeza is another example of man introducing a plant to the United States from another continent, thinking he could "control" nature. I have a USDA Bulletin from 1970 in my office files titled, Sericea Lespedeza, Its Use and Management. I'm not sure how long ago someone first brought it to the US, but if I wouldn't have been there I would have stopped it right now.

Interestingly, something happened along the way from it's first promotion and use in the southern US until it got to Kansas. Through whatever cruel fate of natural selection, the wild serice that we have growing now in Kansas seems to be distinctly different than what my southern county agent friends encourage local growers to still use for a forage legume. Whether it is less aggressive, or produces less seed or has less tannins and thereby it's more palatable to livestock, I don't know. But they don't seem to have an issue with it in the deep south. Here in Kansas though, it is rapidly spreading all across the state and is an aggressive invasive plant in rangelands and waste areas, thereby landing it on the Kansas Noxious Weed list.

Let's be clear that we have several native lespedeza species that are present in our native prairies that are very beneficial and useful plants. Sericea lespedeza is not in the same category. When we started to realize it was an invasive pest, probably 30 years ago or so, we started studying it heavily, putting out many tests trying to control it with herbicides, management and through intensive grazing with certain livestock species like goats. Heavy grazing by goats will keep sericea from spreading, but also doesn't seem to kill it off. What we've ultimately found is that there is no easy control of this plant, in fact some of us are questioning if it can ever be controlled!

Currently, we focus our efforts on two herbicide treatments a year, recognizing full well that it takes several years to get it in check and then regular monitoring so it doesn't get restarted. It is a prolific seed producer and spring fires seem to encourage the little seed to sprout and start growing. Like many legume species the seed has a hard seed coat. The fire scarifies that seed coat which stimulates it to start germinating. Unfortunately not all the seed grows at once and some seeds may lay dormant for several years which is what requires the diligent annual monitoring for new seedlings.

Spring herbicide treats are focused on controlling the plant during rapid vegetative growth in June as well as killing the seedlings before they become well established. These treatments emphasize the use of triclopyr. Late summer treatments are conditional on having good enough growing conditions so that the plant starts to bloom and are normally applied during August and September as blooming starts. These late summer treatments emphasize the use of herbicides containing metsulfuron. But they are only effective if growing conditions are adequate that the plants are blooming.

In recent years researchers have been looking at performing late summer burns (August) on areas of heavy sericea lespedeza infestations. These burns have shown a great ability to prevent seed production, which is a step forward. Established sericea plants survive the burn but are likely weakened and herbicide treatments still need to continue. Late summer burns need more research but appear to be another tool to add to the toolbox as we try to control this invasive plant. Ultimately though, diligent monitoring and ongoing herbicide treatments are required to slow sericea lespedeza down.