

Purple loosestrife is a beautiful plant that can dominate shorelines and wetlands.

PAUL D. OHLENBUSCH PHOTO



Sericea Lespedeza & Purple Loosestrife

By Paul D. Ohlenbusch

Many plants have been introduced for many different purposes. These two species are good examples of what has happened when good intentions go bad. *Sericea lespedeza* (*Lespedeza cuneata*) was introduced as a forage and purple loosestrife (*Lythrum salicaria*) for ornamental and medicinal uses

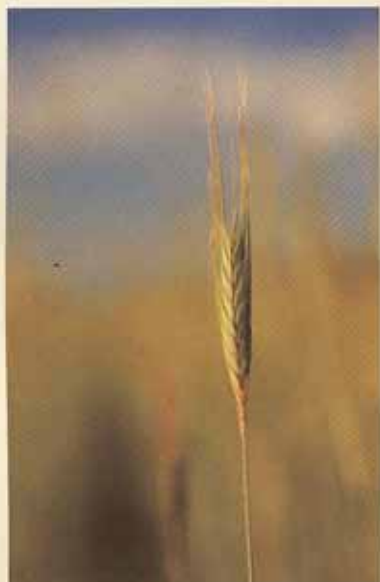
Sericea lespedeza has both a good and bad history. In the southeast states it is known as the “poor man’s alfalfa,” while in the Midwest and plains it is becoming a problem. Kansas, Nebraska, Tennessee, Colorado and possibly more have declared it a noxious weed.

Sericea lespedeza was first planted in the United States in 1896 by the North Carolina Agricultural Experiment Station. Little study or use of *sericea lespedeza* was done until 1924 when the USDA (United States Department of Agriculture) secured seed from Japan and planted it at the Arlington Experiment Farm in Virginia. Its perceived value at the time for erosion control, hay, wildlife cover and food, and seed production was generally accepted.

Friend or Foe?

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MANAGEMENT TIPS



Winter is over and spring is here. The need to get ready for spring and summer has arrived.

Continue to evaluate rainfall/snow/ice history and current soil moisture status. If soil moisture has been short, plant growth this year may be limited. Low soil moisture can mean little spring plant growth.

South Texas and Gulf Coast: monitor for introduced and invasive weed and brush and evaluate control options.

Planning on seeding native grasses? South Texas should be in the process, Central Texas getting ready and North Texas by March/April.

Monitor water sources for needed levels and quality. Develop options if sources are less than optimal, including for spring and summer use.

Review and adjust grazing and economic management plans and adjust for current and past weather conditions as well as changing economic factors.

Continue planning for 2008 and looking toward 2009. It's never too late to consider a five-year management plan.

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In recent years, the erosion control and wildlife cover, and food uses have been found to be limited at best. The primary means of seed spread is by water and wildlife even though the seed are not quality nutrition. *Sericea lespedeza* is adapted to the eastern half of Texas through Nebraska and east to New York.

The problem is the tannin content of the plant when it is green. In cattle, the tannin binds with proteins in the digestive tract and reduces the nutrients available to the animal. Goats, and to some extent sheep, seem to do well. In Kansas, meat goats are used as a biological control, grazing from late June into September.

In the southeast, it is generally low in tannin content, while elsewhere it has a high content. The plants even look different. One interesting change occurs when *sericea lespedeza* is cut for hay. The drying process degrades the tannins and the hay is almost equal to alfalfa in quality.

Purple loosestrife was originally throughout Great Britain and across central and southern Europe to central Russia, Japan, Manchuria China, southeast Asia and northern India. It was introduced to the northeast states in the early 1800s for ornamental and medicinal uses. It is sold in most states today unless prohibited, currently Minnesota, Wisconsin, Illinois and Kansas. Purple loosestrife has been found in every state except Florida.

The plant can be misidentified for fireweed (*Epilobium angustifolium*), blue vervain (*Verbena hastata*) or blazing stars (*Liatris spp.*). It can reach six feet or taller and spread by vegetative means and seed. It is on the Texas noxious weed list.

Purple loosestrife has an extended flowering season, normally from June to September. It produces vast quantities of seed. The flowers require pollination by insects. A mature plant may have as many as 30 flowering stems capable of producing an estimated two to three million, minute seeds per year. The generally accepted means of seed movement is migratory waterfowl since the seed is eaten.

Purple loosestrife is adapted to natural and disturbed wetlands, ponds and streams. It establishes and expands by out-competing and replacing native



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The flowers of *sericea lespedeza* are small and white.

grasses, sedges and other flowering plants that provide a higher quality nutrition for wildlife.

The highly invasive nature of purple loosestrife allows it to form dense stands that restrict native wetland plant species, some federally endangered orchids and reduce habitat for waterfowl.

Purple loosestrife has grown thick enough to prevent domestic animals from reaching stock ponds.

What do you do if you think you have one of these? First, make sure you have identified the plant correctly. County Extension Offices and NRCS Offices can help obtain positive identification. Both plants can be confused with native species. Controlling both can be done by hand pulling when a small number of plants are present. In larger numbers, chemical is required. Application of chemicals requires specific timing and application to be effective.

Want more information? There are links to more detailed information on my Web site (www.grassbydesign.com) under TDA articles.

Next time: Johnsongrass

References Used:

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Swearingen, J. M. 2005. *Purple loosestrife*. Plant Conservation Alliance's Alien Plant Working Group. 3 pp. 