

Misconception of *Sericea Lespedeza* as an Invasive Species

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Sericea lespedeza is a widely adapted plant in the eastern part of the USA. It is a deep-rooted perennial legume that can be established successfully in cultivated areas as well as on eroded and depleted soils. This plant has a great value in many situations because it can improve physical, chemical and biological properties of soils and is particularly good for those that are eroded.

Sericea lespedeza is used as a forage crop for grazing or hay production or as a soil conservation plant in soil mine reclamation and other areas where soil has been disturbed and needs to be stabilized. When *sericea lespedeza* was introduced to the country, the plant material used was made up of wild plants which had coarse and woody stems. For many years, one of the major limitations for using the plant as a forage crop was that if grazed or clipped frequently, the stand would die off. To prevent stand losses and to get high forage yield, plants were allowed to grow to the point that they would be over mature (lignified) and some animals (particularly cattle) will not graze any part of the plant other than the tip of the stems that were still young and tender. The part of the stem that is young and tender can be easily seen by bending the stems. The zone where the stems are flexible, bend and do not break (roughly the top 4-10 inches) is the zone that has good forage quality and that animals will graze.

In 1997, Auburn University and the Alabama Agricultural Experiment Station released AU Grazer™, a cultivar of *sericea lespedeza* that can tolerate grazing or frequent clipping and has thinner and pliable stems. In this way, young, tender and more nutritious forage is available to animals, while at the same time farmers need not worry about losing the stand. However, this does not mean that AU Grazer™ does not need some grazing or clipping management as constant close defoliation will weaken stands of any forage crop.

Recently, researchers have determined that consumption of *sericea lespedeza* by livestock could help to control gastrointestinal parasites in most controlled studies, reduce methane emissions (a greenhouse gas) and improve protein utilization in ruminants. Additional field testing is needed to formulate management practices in a production system. These results add new and important uses of the plant.

On the other hand, *sericea lespedeza* can be an unwanted species in some ecosystems such as in native grasslands in the Plains states. The Southeast Exotic Pest Plant Council (<http://www.se-eppc.org/>, verified February 2, 2007) has classified plants as invasive based on their unwanted presence in some ecosystems. This classification does not consider their economic value or usefulness in agricultural systems. Unfortunately, the label “invasive species” gives the impression that it is a horrible plant with no redeeming qualities.

Among the many cultivated plants that were classified by the Southeast Exotic Pest Plant Council as invasive plants are ***sericea lespedeza*** and other non-native forages

including **bahiagrass** (*Paspalum notatum* Fluegge), **bermudagrass** (*Cynodon dactylon* (L.) Pers), **tall fescue** (*Lolium arundinaceum* (Schreb.) S.J. Darbyshire), **orchardgrass** (*Dactylis glomerata* L.), **Kentucky bluegrass** (*Poa pratensis* L.), **timothy** (*Phleum pratense* L.), **smooth brome** (*Bromus inermis* Leyss.), **Korean lespedeza** (*Kummerowia stipulacea* (Maxim.) Makino), **striate or annual or common or Japanese lespedeza** (*Kummerowia striata* (Thunb.) Schindl.) and **common vetch** (*Vicia sativa* L.). **These species occupy many millions of acres of productive pasture and hay land in the United States.**

In the case of sericea lespedeza, movement into unwanted areas could be prevented by utilizing the plant so that it cannot produce seeds. This plant does **not** reproduce vegetatively (by root or stem sections) under field conditions. Livestock can be effectively used to control unwanted vegetation such as sericea lespedeza.