

Frequent Questions and Answers Regarding Sericea Lespedeza

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1. There are several lespedezas on the market. What are the differences among them?

Some are used mostly as forage and others only in plantings for wildlife

Forage type

Sericea Lespedeza, perennial lespedeza, Chinese lespedeza - it is a perennial, lives many years

Striate Lespedeza, annual lespedeza, common lespedeza, Japanese lespedeza, Japan clover - it is an annual, it needs to be planted or reseeded every year

Korean Lespedeza, Korean bushclover, Korean clover - it is an annual, it needs to be planted or reseeded every year

Wildlife type

Bicolor Lespedeza - it is a perennial

Lespedeza thunbergii - it is a perennial

2. There are several varieties of sericea lespedeza (SL). Do they have the same tannin content?

Not all sericea lespedeza (SL) varieties have the same tannin content. Some are called low-tannin sericea lespedeza, giving the idea that all plants that make up the variety have low tannin content. That is incorrect. Low-tannin varieties are a mixture of plants some with low and some with high tannin content. Thus, on the average they have lower tannin compared to the other varieties that have plants with a more uniform high tannin level.

3. If a variety is low-tannin - but not all plants are low - will animals selectively graze?

No, they will not graze selectively. One major problem with grazing the low-tannin cultivars is that they are very sensitive to overgrazing thus the stand can easily be killed.

4. Which are the low tannin cultivars?

They are AU Lotan and AU Donnelly.

For more information see <http://www.ag.auburn.edu/agrn//mosjidis/sericea1lespedeza.htm> and <http://www.aces.edu/department/forages/>

5. Do we have any idea of why animals don't like high-tannin SL? Taste or Texture?

Animals, including cattle, will eat high-tannin SL. Cattle prefer to graze SL plants with fine, pliable stems over plants with coarse stems and they will eat more if the SL plants have lower levels of tannins. This has been known since 1954 but somehow forgotten.

6. Do all the varieties of SL have the same effect on parasite control?

Not all varieties have been tested for parasite control. The main variety tested has been AU Grazer™ because it tolerates grazing better than the other varieties (high or low in tannins) and it has fine, pliable stems. AU Grazer™ has been found to retain the ability to control gastrointestinal parasites after harvest. Grazing trials in Arkansas and Oklahoma using SL also leads to fewer number of animals dewormed and decreased fecal egg counts. For more information see the Southern Consortium for Small Ruminant Parasite Control <http://www.scsrpc.org/>. For additional information <http://www.attra.ncat.org/attra-pub/parasitesheep.html>

7. Does SL control ALL intestinal parasites in small ruminants?

Most experiments have shown up to now that SL reduces fecal egg counts the barber's pole worm *Haemonchus contortus*. SL may have a negative effect on other gastrointestinal parasitic worm but that has not been demonstrated yet. If the animals are infected with worms other than the barber's pole worm, fecal egg counts may not be reduced by including SL in the diet.

8. Do all plants that contain tannins control parasites equally well?

No, of the plants tested, SL has been found to be one of the best in controlling gastrointestinal parasites

9. Some states (KS, CO) consider SL a noxious weed. Is it like kudzu?

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 bromegrass** (*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.

10. In some places it is suggested that SL plant is not palatable. Is this true?

When sericea lespedeza was introduced to the United States, the plant material used was made up of wild plants that had coarse and woody stems. This forage, which was often allowed to become overly mature, was not palatable except the top of the stems. Varieties developed in recent years have finer stems and are quite palatable when managed properly.

11. Is sericea lespedeza hay palatable?

Yes, animals will readily eat SL hay. When the SL hay is from over mature plants that have coarse stems farmers chop it and animals will eat it.

12. Can SL be grazed?

For many years, one of the major limitations for using SL plants 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 but some animals (particularly cattle) will only graze the top of the stems that are still young and tender. The part of the stem that is young and tender can easily be seen by bending the stems. The zone where the stems are flexible, where they bend but do not break (roughly the top 4-10 inches), is the zone that has good forage quality and that animals will graze.

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 more pliable stems. This cultivar can make young, tender and more nutritious forage 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. AU Grazer™ still requires grazing or clipping management since constant close defoliation will weaken stands of any forage crop.

13. Where can SL seed be found?

There are few known major seed producers. To obtain seed of SL you could contact

Sims Brothers, Inc.
3924 County Rd. 87
Union Springs, AL 36089

(334) 738-2619
FAX: (334) 738-2620
email: simsbrothers@yahoo.com
Web page: <http://simsbrothers.com/>

Mr. Melvin M. Moorer, Jr.
Sec/Treas.
Central Alabama Certified
Seed Producers Association
333 Walnut Street Ext.
Prattville, AL 36067

14. How is SL planted?

See <http://www.ag.auburn.edu/agrn//mosjidis/sericea1lespedeza.htm>,
<http://www.aces.edu/pubs/docs/A/ANR-1318/ANR-1318.pdf>,
<http://www.aces.edu/departement/forages/> or
<http://www.scsrpc.org/>

15. Is tannin toxic?

There is not a single type of tannin. There are many types of **tannins** (plural!). A few are reported to be toxic to some animals. But many tannins have been found to have beneficial effects for human and animal health.

16. Are tannins in all tannin-containing plants equal?

No. Tannins change from one plant species to another and they may have different effects on the animals depending on their plant source.

17. Will tannins reduce animal weight gain?

Inclusion of a large amount of tannins in the diet could reduce weight gains. However, results of experiments that included SL in the diet have shown similar or superior weight gains when compared to other forages commonly grown in the Southeast, such as bermudagrass.

18. Will tannins have a negative effect on milk quality?

A prominent farmer from South Africa grows SL and other forages to feed about 500 dairy cows. In his opinion, there is no negative effect of SL on milk quality.

19. I read that condensed tannins protect protein and help the animal make better use of it. Is this true for SL tannins?

Yes, SL can protect easily digested proteins from quick degradation in ruminants. Thus it helps the animal retain protein that otherwise would be lost through the urine.

20. I read that ruminants are major polluters because they are a significant source of methane, a greenhouse gas. I also read that tannins can reduce emission of methane from ruminants. Can SL help to reduce environmental contamination?

Yes, SL has been found to reduce methane emission in goats 30 to 57% depending on how it is measured.