



## Southeast Exotic Pest Plant Council Invasive Plant Manual

**Common Name:** Sericea lespedeza, Chinese lespedeza, Chinese bushclover, Himalayan bushclover

**Scientific Name:** *Lespedeza cuneata* (Dum.-Cours.) G. Don

Sericea lespedeza is a member of the Pea or Fabaceae family. This invasive plant has spread throughout the eastern United States and is a significant threat to native prairies and rangelands. Although high in crude protein, lespedeza is not a preferred forage due to its high concentration of tannins. *L. cuneata* is used as a medicinal herb to treat ailments such as skin ulcerations, dysentery, enteritis, and hernias.

**Height:** Numerous branching stems may grow up to one to two meters.

**Leaves:** Leaves are compound in groups of three. Wedge shaped leaflets are oblong, green with silver highlights. Leaflets are covered with densely flattened hairs, giving a grayish-green or silvery appearance.

**Flowers:** Flowers are predominantly white with violet along the veins. Flowers occur in clusters or solitary and emerge close to the stem in the leaf axils on the upper third of the plant. Flowers emerge from mid-July to October.



Photo by James H. Miller

**Fruit/Seeds:** The seeds of lespedeza are borne in a legume that is flat and oval shaped. The seeds are tan or greenish in color measuring from 0.2 to 0.75 centimeters in size.

### Life History

Chinese lespedeza begins growth from root crown buds at the base of the previous year's stem. The flowers begin to develop in late July and continue through October. Within the *Lespedeza* genus there are no specialized structures for seed dispersal. Dispersal is aided by animals consuming the fruits and passing the seeds. A study on natural populations found that several species of *Lespedeza* comprise 1.5% to 86.8% of the annual diet of bobwhite quail in the southeastern U.S. Autumn dispersal is aided by the haying of infested fields. Because it is unpalatable, wildlife may forage on surrounding native vegetation, thereby increasing its rate of spread.

Scarification is necessary for the germination of lespedeza seeds. Mature seeds of this genus remain



Photo by James H. Miller



viable for up to twenty years; one study found a germination rate of 60% after cold storage for 55 years. Seedlings may represent only 1% of the seeds actually available in the soil.

Photo by James H. Miller



Photo by James H. Miller

### Origin and Distribution

*Sericea lespedeza* was introduced from Japan in 1896 in North Carolina to be tested as an agricultural crop. Since that time it has been used as livestock forage, erosion control, in wildlife plots, and to improve eroded soil. *Lespedeza* is present throughout the eastern United States. It is especially common in the piedmont and coastal plain.

### Similar Species

*L. capitata* and *L. hirta* have cream-colored or yellowish flowers similar to *L. cuneata*. The base of the upper petal of the flower of *sericea lespedeza* has two broad violet streaks on the inside of the center portion. The flowers of *L. capitata* and *L. hirta* occur in dense clusters and the stem hairs are spreading rather than being flattened to the stem as in *L. cuneata*.

### Habitat

*L. cuneata* will grow on a variety of sites including pastures, rangelands, prairies, eroded slopes, and roadsides. *Lespedeza* will grow in a wide variety of soils and is very tolerant of drought. It is moderately shade tolerant and will persist along wooded edges and sparsely forested areas.

### Management Recommendations

**Mechanical Control:** Hand pulling of mature plants is impractical due to *lespedeza*'s extensive perennial root system. Mowing plants in the flower bud stage for two or three consecutive years may reduce the vigor of *lespedeza* stands and control further spread. Plants should be cut before seeds mature and as low to the ground as possible. Impact to adjacent native plants should be minimized as much as possible.

### Herbicidal Control

**Spot Treatments:** Herbicidal controls are effective as long as the plants are actively growing. Glyphosate, triclopyr and metsulfuron have been shown to be effective in controlling Chinese *lespedeza*. The addition of a non-ionic surfactant at a concentration of 0.5% improves the effectiveness of foliar treatments. A 1%-2% solution triclopyr or glyphosate thoroughly mixed with water is effective during the vegetative stage prior to branching or during flowering. Metsulfuron methyl should be applied at a rate of 0.3g/gallon of water. Treatments should cover the leaves and stems of plants to the point of runoff. Read the herbicide label thoroughly prior to use.

**Broadcast:** Broadcast treatments are appropriate for large infestations such as fields or prairies. Since native plants will be intermingled with *lespedeza*, triclopyr and metsulfuron are the preferred herbicides due to their selective characteristics. Apply triclopyr at a rate of 1.0-1.5 pints per acre.

Metsulfuron should be applied at a rate of 0.5 oz per acre. Use a non-ionic surfactant according to manufacturer's instructions to improve effectiveness.

### Bibliography

Altom, J.V., J.F. Stritzke, D.L. Weeks. *Sericea lespedeza* (*Lespedeza cuneata*). Control with Selected

Postemergence Herbicides. Weed Technology Journal of the Weed Science Society of America 6 (3):573-576. 1992.

Beeler, Jennifer. National Park Service: Cumberland Gap National Historic Park. Personal Communication. Nov. 19, 2002.

Gleason, H. A.; Cronquist, A. Manual of vascular plants of northeastern United States and adjacent Canada. 2nd ed. The New York Botanical Garden. 1991.

Guernsey, W.J. 1977. Sericea lespedeza (*Lespedeza cuneata*): Its Use and Management. U.S. Department of Agriculture Farmers Bulletin No. 2245, 29 pp.

Hoveland, C.S. and E.D. Donnelly. 1985.

Hoveland, C.S., G.A. Buchanan, E.D. Donnelly. Establishment of Sericea lespedeza; Weed Science 19: 21-24. 1971.

Invasive Alien Plant Species of Virginia Chinese Lespedeza (*Lespedeza cuneata* (Dumont) G. Don). Virginia Natural Heritage Program. Oct. 18, 2002. <<http://www.vnps.org/invasive/invflesp.htm>>.

Johnson, Kristine. National Park Service: Great Smoky Mountains National Park. Personal Communication. Oct. 22, 2002.

Kartesz, J.T. A Synonymized Checklist and Atlas with Biological Attributes for the Vascular Flora of the United States, Canada, and Greenland. First Edition. In: Kartesz, J.T., and C.A. Meacham. Synthesis of the North American Flora, Version 1.0. North Carolina Botanical Garden, Chapel Hill, NC. 1999.

USDA, NRCS. 2002. The PLANTS Database, Version 3.5 <<http://plants.usda.gov>>. National Plant Data Center, Baton Rouge, LA 70874-4490 USA. Oct. 22, 2002.

*Lespedeza cuneata* TI SAO CHAO Wedge Shaped Bush Clover. Oct. 28 2002. <<http://www.innerpath.com.au/matmed/herbs/lesp~cun.html>>

Ohlenbusch, Paul D. Sericea Control. Kansas State University. Nov. 4 2002 <<http://www.oznet.ksu.edu/sericea/sericeainfo/sericeacontrol/chemical>>.

Ohlenbusch, Paul D. Sericea Control. Kansas State University. Nov. 4 2002 <[http://www.oznet.ksu.edu/sericea/sericea\\_info.htm](http://www.oznet.ksu.edu/sericea/sericea_info.htm)>.

Radford, A. E.; Ahles, H. E.; Bell, C. R. Manual of the vascular flora of the Carolinas. Chapel Hill, NC: The University of North Carolina Press; 1968.

Remaley, Tom. Chinese Lespedeza. Plant Conservation Alliance, Alien Plant Working Group. Oct. 30 2002. <<http://bugwood.org/WeedsGoneWild/fact/lecu1.htm>>.

Sericea lespedeza. Purdue University. Nov. 2, 2002. <[http://www.hort.purdue.edu/newcrop/Crops/Sericea\\_lespedeza.html](http://www.hort.purdue.edu/newcrop/Crops/Sericea_lespedeza.html)>

Smith, A.E. and G.V. Calvert. Weed Control in Sericea Lespedeza. University of Georgia Experiment Station Research Bulletin 357, 12 p. 1987.

Vegetation Management Guideline Conservation Commission of Missouri. Sericea Lespedeza [*Lespedeza cuneata* (Dum.-Cours.) Don] Nov. 4, 2002 <<http://www.conservation.state.mo.us/nathis/exotic/vegman/twentytw.htm>>.

Wolf, D.D. and Dove, D.C. Grazing Preference for Low Tannin Sericea Lespedeza; Proceedings of the Forage Grassland Conference, Lexington, Kentucky, p. 216-219. 1987.

[ [Home](#) ] [ [Contents](#) ]



Invasive.org is a joint project of  
The Bugwood Network, [USDA Forest Service](#) & [USDA APHIS PPQ](#).  
The University of Georgia - [Warnell School of Forest Resources](#) and  
[College of Agricultural and Environmental Sciences](#) - [Dept. of Entomology](#)  
Last updated on Wednesday, November 05, 2003 at 01:20 PM  
Questions and/or comments to the [Bugwood Webmaster](#)