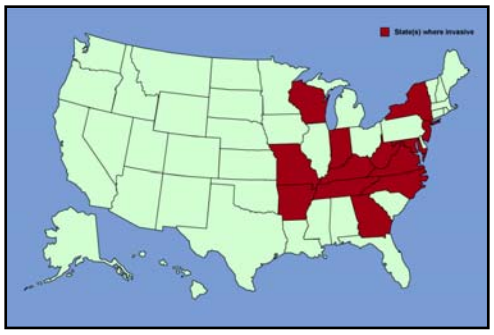
Chinese Lespedeza

Lespedeza cuneata (Dumont) G. Don
Pea family (Fabaceae)

NATIVE RANGE
Eastern Asia

DESCRIPTION
Chinese lespedeza is a warm season, perennial herbaceous plant. It has an erect growth form, ranging from about 3 to 5½ feet in height, and leaves that alternate along the stem. Each leaf is divided into three smaller leaflets, about ½ to 1 inch long, which are narrowly oblong and pointed, with awl-shaped spines. Leaflets are covered with densely flattened hairs, giving a grayish-green or silvery appearance. Mature stems are somewhat woody and fibrous with sharp, stiff, flattened bristles. Small (about ¼ in.) creamy white to pale yellow flowers emerge either singly or in clusters of 2-4, from the axils of the upper and median leaves.

ECOLOGICAL THREAT
Chinese lespedeza, sometimes called sericea lespedeza, is primarily a threat to open areas such as meadows, prairies, open woodlands, wetland borders and fields. Once it gains a foothold, it can crowd out native plants and develop an extensive seed bank in the soil, ensuring its long residence at a site. Established dense stands of lespedeza suppress native flora and its high tannin content makes it unpalatable to native wildlife as well as livestock.



DISTRIBUTION IN THE UNITED STATES
Chinese lespedeza is now found throughout the U.S.

HABITAT IN THE UNITED STATES
Chinese lespedeza can grow in a variety of habitats including severely eroded sterile soils. It will invade open woodlands, fields, prairies, borders of ponds and swamps, meadows, and open disturbed ground, but is intolerant of shade.

BACKGROUND
Chinese lespedeza is native to eastern Asia and was first introduced to the southern United States. Widespread use of lespedeza by federal and state agencies for bank stabilization, soil improvement, wildlife and forage and cover, and hay facilitated its spread throughout the eastern United States.

BIOLOGY & SPREAD
Chinese lespedeza begins growth from root crown buds at the base of last 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.

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

MANAGEMENT OPTIONS
Mechanical and chemical methods are the most effective options currently available for Chinese lespedeza. Hand pulling is impractical due to lespedza'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 as low to the ground as possible and impact to adjacent native plants should be minimized as much as possible.

Since root reserves increase up to the flower bud stage, all herbicide treatments should be completed in early to mid summer. The addition of a non-ionic surfactant at a concentration of 0.5% improves the effectiveness of foliar treatments. Triclopyr and clopyralid have been shown to be effective in controlling Chinese lespedeza. A 2% solution Triclopyr or 0.5% solution of clopyralid throughly mixed with water is effective during the vegetative stage prior to branching or during flowering. Treatments should cover the leaves and stems of plants to the point of runoff. These herbicides are not labeled for use in wet areas or adjacent to streams. On wet sites a 2% solution of glyphosate is effective from last June until seed set.

USE PESTICIDES WISELY: Always read the entire pesticide label carefully, follow all mixing and application instructions and wear all recommended personal protective gear and clothing. Contact your state department of agriculture for any additional pesticide use requirements, restrictions or recommendations.

NOTICE: mention of pesticide products on this page does not constitute endorsement of any material.

CONTACTS

For more information on the management of Chinese lespedeza, please contact:

- Kris Johnson, Great Smoky Mountains National Park, Gatlinburg, TN

SUGGESTED ALTERNATIVE PLANTS

Although not a popular ornamental in the U.S., some suitable native alternatives for Chinese lespedeza include butterflyweed (*Asclepias tuberosa*), joe-pye weed (*Eupatorium dubium*), black-eyed Susan (*Rudbeckia fulgida*), big blue stem (*Andropogon gerardii*), or Indian grass (*Sorghastrum nutans*). Contact your state native plant society for further suggestions for plants native to your particular locale.

OTHER LINKS

- http://www.invasive.org/search/action.cfm?q=Lespedeza%20cuneata

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