

Knox County Cooperative Invasive Species Management Area

Invasive Species of the Month for September 2019

Bicolor Lespedeza (Lespedeza bicolor)

Origin: China

Introduction: First introduced as an ornamental species in the mid 1800s and promoted for erosion control, wildlife value, and mine reclamation in the 1930s to 50s

Botanical Terminology:

Raceme – a type of flowering structure with separate flowers attached to a central stem by short stalks. They will develop from the bottom up.

Interesting Fact: Bicolor Lespedeza was heavily promoted for Northern Bobwhite Quail in the 1950s. While quail do feed on the seeds, studies have shown that Bicolor Lespedeza does not provide great habitat for the birds.

Description: Bicolor Lespedeza, also known as Shrub Lespedeza, is an herbaceous perennial in the Legume Family that can grow up to 10-12 ft. tall and wide. It has alternate, compound leaves and flowering racemes of red-purple flowers that turn into small single-seed pods when ripe.

Defining characteristics:

- Alternate, compound leaves with 3 leaflets per leaf
- Leaves have lighter colored undersides
- Flowering racemes of red-purple flowers at the end of branches in late Summer to early Fall
- Fruit is small seedpods (legumes) with one seed per pod.



Left Images: Bicolor Lespedeza flowers.

<u>Center Image</u>: The underside of the leaves (note the lighter color)

Right Images: The stem and leaves of Bicolor Lespedeza.



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Habitat: Disturbed areas, right-of-ways, forest edges, fallow fields, hedgerows, and prairies



Above Image: A large Bicolor Lespedeza shrub in full bloom along Highway 41 in Sullivan County.

Ecological threat: Bicolor Lespedeza can produce a significant amount of seed and has a high germination rate. In addition, the seeds remain viable in the soil seedbank for decades, making it a long-term management/monitoring species. It then grows rather quickly, reaching full size in 3 to 8 years. Besides seed production, it can reproduce vegetatively and has been known to increase after mowing or burning. Bicolor Lespedeza can form dense stands that inhibit the growth of native species and reduce quality of habitat. Finally, as a nitrogen-fixer, it alters soil nutrient levels.

Control Methods:

- <u>Manual</u>: Pulling of young individuals can be effective. Mowing is generally not effective but can be used in conjunction with herbicide use to control large areas of plants.
- <u>Chemical</u>: Generally the most effective method especially on large, dense patches. Foliar applications of herbicides with a 2% glyphosate* or 2% triclopyr* solution have been shown to be effective. Herbicides with metsulfuron methyl*, aminopyralid*, and hexazinone* may also provide effective control.

^{*}Always follow herbicide label instructions.



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References

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