Forage lespedezas are warm-season, leguminous, nitrogen-producing crops. They are used for grazing and hay throughout the Southeast. Since all the lespedezas used for forage in Mississippi are warm-season, they begin growth in late April and are killed back by frosts in the fall.

There are two types of lespedezas: annual and perennial. Perennial lespedezas have a high tannin level, which reduces palatability and digestibility. However, annual lespedezas are very low in tannin and have much higher digestibility. The lespedeza may also be known as Japanese clover, but it is not a true clover.

**Variedties**

Lespedezas used for forage are classified into two species. The annuals are 1) Striata (*Kummerowia striata*), including varieties Common, Kobe, and Marion; and 2) Korean (*Kummerowia stipulacea*), including varieties Climax, Summitt, Yadkin, and Rowan. Korean lespedeza is better adapted to the Midwest; Striata is adapted to the lower South.

Kobe and Marion are recommended varieties for Mississippi. They germinate in April, grow all summer, and produce seed before frost. If management allows a seed crop, you can expect natural reseeded stands for many years. These are small-stemmed, leafy forage crops, very low in tannin and highly palatable and nutritious for livestock.

Perennial lespedeza is also known as sericea (*Lespedeza cuneata*). Coarse, high-tannin varieties such as Serela, Serela 76, and Interstate 76, are not well-suited for pasture use or hay production. Au-Lotan and Au-Donnelly have lower tannin levels and are best for forage and pasture use. They were developed at Auburn University, so they are well-adapted to Mississippi conditions.

Sericea lespedeza lives from year to year by its root system. It also produces a seed crop in late summer and fall. Sericea is a coarse-stemmed plant used mainly for erosion control and soil conservation. Its high tannin levels bind protein and significantly reduce digestibility. If you grow sericea, plant AuLotan or AuDonnelly as their tannin levels are lower than Serela and Serela 76, and much lower than Interstate 76.

**Land Selection and Establishment**

Lespedeza will grow in almost any soil. It does well on sandy and loam-type soils. Sericea is a deep-rooted perennial that also does well on shallow soils with a fragipan or drainage restrictions. Lespedezas will tolerate lower pH (more acidic) soils than clover but will respond to lime applications on acid soils. Even though lespedeza will grow on shallow soils, it will produce better on good land. Take a soil test (see Information Sheet 346 Soil Testing for the Farmer) prior to seedbed preparation, and incorporate lime, phosphate, and potash as determined by the soil test results.

Establishment of lespedeza is best when you broadcast seed on a well-prepared seedbed, although sod-seeding of sericea with the proper equipment following chemical kill can also be successful. Sod-seeding of sericea works best in August while prepared seedbeds are best in the spring. Annual lespedeza must be sown early in the spring. Many herbicides labeled for alfalfa may also be used for sericea lespedeza. See Information Sheet 945 Forage Weed Control in Pastures.

Inoculate seed with the correct rhizobium strain since this bacterial culture enables the lespedeza plant to make its own nitrogen. Use a strain of inoculum recommended for lespedeza (see Information Sheet 1083 Inoculating Forage Legumes). Properly inoculated lespedeza will need no nitrogen applications as long as you have a good stand. Seed 30 pounds per acre beginning in March and no later than June if planted on a prepared seedbed. Planting early is better because late plantings can suffer draught.

**Companion Crops**

Most lespedezas are grown in a pure stand, especially if used for hay production. However, they can be grown as a companion crop in combination with other grasses.

Sod-seeding small grains (oats, wheat, rye) in the fall will provide grazing in the late winter and spring, and will not damage the lespedeza if the small grain is grazed closely in March and April. If a small grain is seeded, apply the equivalent of 200 pounds of ammonium nitrate per acre in late January or early February.

Lespedeza will also grow in combination with permanent summer grasses (bahia, bermuda, dallis). It is difficult to keep a stand of annual lespedeza with dense sod-forming grasses like bahiagrass and common bermudagrass. However, some sericea-bahiagrass stands have persisted under grazing conditions for several years. In these grasses, renovation by disk- ing every third spring will help keep a stand of lespedeza.
Grazing and Hay Management

Grazing begins about June, depending on the weather, and forage is produced until frost. The annual lespedezas are used more for grazing than sericea, which is used mainly for hay. Annual lespedezas can tolerate close grazing, but rotational grazing on sericea lespedeza is essential. Begin grazing when lespedeza is about 8 to 12 inches tall and graze no closer than 2 inches tall.

Using lespedeza for hay has been popular in the Southeast for many years. The quality is fair to good, depending on the stage of growth and leafiness. Sericea lespedeza hay can be coarse and stemmy, thus reducing the quality. Annual lespedeza produces higher quality hay than does sericea. Another problem with all lespedezas is leaf-shattering. Leaves will shatter easily if left in the windrow too long.

Annual lespedeza will yield up to 2 tons of hay in one harvest. Harvest in the early bloom stage (July for most areas). Annual lespedeza cures rapidly following clipping. When cut between 10 and 15 inches high, it can be windrowed and baled the day after clipping. A second harvest may be possible, but seed production is essential for a stand the following year. Allow the regrowth following harvest to produce seed. To allow seed production for a natural reseeding of annual lespedeza, do not graze or cut hay in October and November. Once the seeds have shattered in the fall, the remaining stubble can be grazed.

Harvesting sericea lespedeza for hay at the right stage is important for quality. A height of 14 to 16 inches is the best stage of growth for harvesting and will assure good yields and maintain quality. You can tell when sericea is too mature by the “stem test.” If the stem breaks when bent, it is too mature and has lost some quality. For best quality, the top should bend all the way to the ground without breaking the stem. Sericea also dries quickly following harvest. In hot weather, withering for only a few hours is sufficient. Sericea can be cut in the morning, windrowed that afternoon, and baled the following day. Remember, the leaves shatter if left too long between cutting and baling.

Since sericea is a perennial, seed production is not necessary to maintain a stand. However, a stand will last longer if you have two harvests of hay and allow the regrowth following the second cut to stand until after frost. This not only allows some seed production, but it also allows the root system to store more carbohydrates for food reserves. This helps it withstand more cold weather and come out better in the spring. It’s also critical to maintain medium to high levels of potash in the soil.

Seed Production

Lespedeza can be harvested for seed throughout its growing area. To prevent shattering losses, harvest seeds as soon as possible after maturity. Research has shown if harvesting is delayed 2 to 3 weeks following maturity, as much as half of the potential seed yield is lost due to shattering. Normal maturity dates range from September to November, depending on the area of the state.

Striata varieties will normally yield 100 to 250 pounds of seed per acre. Korean varieties will produce around 300 pounds per acre. Sericea lespedeza will produce 200 to 400 pounds of seed per acre.

Pests

Several diseases, including nematodes, attack lespedezas. The major insects significantly affecting lespedeza in Mississippi are fall armyworms and grasshoppers. The fall armyworm is the most destructive. Fall armyworms are caterpillars that eat the leaves and are worse on lespedeza in hot, dry weather. See Information Sheet 722 Control of Insects Attacking Forage and Pasture Crops for control recommendations for these and other pests in lespedeza.