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AGRICULTURAL EXPERIMENT STATION of The Alabama Polytechnic Institute, Auburn, Ala.

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LESPEDEZA SERICEA FOR THE TENNESSEE VALLEY

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Lespedeza sericea, when properly handled, has proved to be a valuable perennial legume hay crop. It comes from the crown each year and, therefore, does not have to be reseeded as in the case of annual varieties of lespedeza, such as common, Kobe, and Korean. It will produce 2 to 3 tons of hay per acre over a period of several years. An area at the Tennessee Valley Substation grew sericea for 10 years and yielded 3 tons of hay per acre. Also at this Substation yields of 200 to 800 pounds of clean seed per acre have been obtained from areas that were not cut for hay.

Soils

Observations indicate that it is adapted to a wide range of soil types, such as heavy clay, light sandy, low damp, or well-drained soils. The area selected for planting in sericea must be free of stumps and large rocks, and it should be level enough to permit mowing the plants close to the ground. Land of medium fertility that is as free of weeds and grass as possible should be selected. Cotton is one of the best crops to follow with sericea.

Seedbed Preparation and Fertilization

The seedbed is thoroughly prepared far enough in advance for it to become firm before seeding. If available a heavy roller or cultipacker can be used to advantage in pulverizing the clods and firming the seedbed. After breaking the land, 500 pounds of 18 per cent superphosphate and 200 pounds of muriate of potash per acre are broadcast and disked into the soil.

Seeding

Sericea is sown rather early in the spring, March 15 to April 15 being the best time. Since it is difficult to get stands, 35 to 40 pounds of good scarified seed are planted per acre. The seed may be broadcast with a cyclone or wheelbarrow seeder or by hand, or they may be planted with a drill made for planting small seed. It is extremely important to not cover the seed more than 1/2 inch deep. It would be better to not cover the seed if they are planted in March. One of the best ways to get a stand is to use a cultipacker on the seedbed and then plant on top of the soil without covering the seed. If planted later, the seed should be covered lightly with a cultipacker or a light drag harrow.

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Care the First Year

Since sericea plants grow slowly the first year, the grower is likely to be disappointed, because there is a larger growth of weeds and grass than of sericea. The sericea should not be cut the first year. Sometime during the winter or early spring, the dead grass and weeds are removed from the ground in order to have it clean for the second year. If a good stand is obtained, the sericea will outgrow the weeds and grass the second year.

Care the Second Year

Sericea is cut for hay usually in May, when the plants reach a height of 12 to 15 inches. After the first cutting it should be allowed to make a seed crop, which may be harvested after frost. After the second year, it may be cut twice a year for hay, usually in May and in July. It should never be cut over twice a year.

Cutting and Curing Hay

Under favorable conditions sericea cures quickly. Therefore, to get the best quality hay, it should be handled rapidly. It should be mowed as soon as the dew is off the plants in the morning, raked into windrows within an hour after cutting, and stored in the barn the same afternoon if the weather is favorable. It can be baled in the field, if it is left until the afternoon of the second day. If saved according to these methods, sericea will make a very satisfactory hay.

Harvesting Seed

Usually the seed are not ready to harvest until the first killing frost. To prevent shattering, the seed are harvested immediately after frost. They may be harvested by cutting early in the morning (before the dew is off), and immediately raked and piled into small cocks. When the straw is dry, the seed are removed by threshing or by beating out on a wire frame over the wagon box. A combine will cut and thresh the seed very satisfactorily. The seed are hulled and scarified after they are thoroughly cured.

Soil Improvement

Sericea is a valuable crop for soil building. Land that has grown sericea for several years has been found to make large yields of corn and other crops. The increase in fertility acquired during the time the land is in sericea will last for several years.