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GROWING ALFALFA ON SAND MOUNTAIN

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Alfalfa is a crop that requires exactness in production methods. Otherwise, good yields will not be obtained and much of the labor, materials and seed will be wasted. Only farmers who are willing to follow closely the directions for successful production should attempt growing alfalfa.

Alfalfa at this Substation is now in its seventh year, averaging about 3 tons per acre per year. However, earlier attempts to grow the crop at this Substation resulted in failures or near failures from all methods except the practices presented here.

The most fertile, well-drained land, located reasonably near the barn, is selected. It has been found here that production of the crop must start a year before planting, and that alfalfa should follow a clean-cultivated crop. In the cropping system on Sand Mountain, cotton is the logical crop for alfalfa to follow.

Hairy vetch is planted in the cotton middles during the last 10 days of August, usually before the cotton is open. The vetch is fertilized with 600 pounds of basic slag and 50 pounds of muriate of potash, or 400 to 500 pounds of 0-14-10 per acre. When the vetch has made excellent growth (not allowed to make seed) in the following spring, the crop is plowed under rather deeply. After each rain or as often as weeds appear during the summer, the area is cultivated with a disc or peg-tooth harrow. By controlling weeds, moisture is conserved.

As soon after turning the vetch as possible, 2 tons of finely ground limestone are applied per acre and are disked into the soil. About August 1 a mixture of 600 pounds of superphosphate, 300 pounds of muriate of potash, and 15 pounds of borax per acre is applied and worked into the soil. About August 15 if moisture is available thoroughly inoculated Kansas common alfalfa seed are planted at the rate of 25 pounds per acre. A whirlwind-type seeder is used, but turned rather slowly. The area is cross-seeded, going over the field at least twice, in order to get a good distribution. The seed are covered promptly with a peg-tooth harrow or a cultipacker.

The first hay crop may be expected the following May or early June, cutting when 25 per cent of the plants are in bloom. The hay is left in

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the swath for 2 to 3 hours and is then raked into loose windrows. If good hay-curing weather prevails, it may be necessary the next day to pull each two windrows together, or put into small cocks, in order to prevent loss of too many leaves. Usually the hay will be ready to haul to the barn the third day, although it may not be dry enough to bale.

As soon as the hay is removed and if a young crop of grass is present, the alfalfa stubble is thoroughly scratched with a peg-tooth harrow, the teeth being set almost straight to destroy weeds and grass. This cultivation is done after each cutting.

Following the first cutting each spring, 300 pounds of superphosphate, 300 pounds of muriate of potash, and 10 to 15 pounds of borax are applied before harrowing the alfalfa stubble. The superphosphate, muriate of potash, and borax should be mixed and distributed in one application.

Unless alfalfa gets a good start in the fall, only two cuttings may be expected the first season. Alfalfa on Sand Mountain should not be cut after about September 1. Growth after that date is left to restock the root system. A good stand may be ruined by cutting too late in the season.