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A YEAR-AROUND GRAZING PROGRAM FOR THE ALKALINE
SOILS OF THE BLACK BELT OF ALABAMA

K. G. BAKER AND E. L. MAYTON

The Black Belt of Alabama, an irregular strip of land extending across the central part of the state, is approximately 170 miles long, east by west, and 20 miles wide, north by south. It is estimated that this area comprises about 2,331,000 acres. The approximate elevation of the Black Belt is 200 feet above sea level and the rainfall is approximately 50 inches, varying within the last 61 years from 36 to 76 inches. All of the soil types within the Black Belt proper are stiff heavy clays, ranging in reaction from strongly basic (pH 8.0) to very acid (pH 4.1).

Previous to the advent of the boll weevil in 1914, the Black Belt area was devoted almost exclusively to the production of cotton as a money crop, with small acreages in corn to supply the partial grain needs for work stock and food for the labor. The heavy winter rainfall on these stiff clay soils prevented early planting of cotton and rushing the crop to maturity ahead of the boll weevil as was possible on lighter soils; thus, this territory suffered more from the advent of the cotton insect pest than did any other section. As a result many acres that had previously been devoted to cotton were abandoned and were allowed to grow up in brush, sedge, and wire grass.

While the Black Belt was still a cotton-producing area, Johnson grass had been introduced as a hay plant. This plant was so well adapted to the well-drained lime soils that it took over as land was abandoned for cotton production. The farmer found that he could cut and bale this crop, and sell it to other areas as a money crop. Johnson grass then became a very important source of income to many cotton farmers. However, as industries replaced horses and mules with other kinds of power, and as farmers increased their own production of hay under the cotton acreage reduction program, the hay producer's outlets became very limited. Therefore, it was necessary to find other uses for this land.

To assist in developing a program for the utilization of the land, the Black Belt Substation was established near Marion Junction, Ala., in 1930. Considering the natural tendency of this area to grow grass and clover, the logical research program was to discover the means of stimulating growth of these plants, and to build a livestock management system that would convert them into marketable products.

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2Superintendent of the Black Belt Substation, Marion Junction, Ala., and Associate Agronomist, Alabama Agricultural Experiment Station, Alabama Polytechnic Institute, Auburn, Ala., respectively.