Notes

LIME INCREASES SORGO YIELDS

In 1944, several experiments were started with various soil and fertilizer treatments in an effort to increase the yields of sorgo grown on Tifton fine sandy loam in southwestern Georgia where yields were unusually low. One of these experiments includes a comparison of lime and no lime with a uniform fertilizer treatment. Lime was added as hydrated lime equivalent to 1,000 pounds per acre of calcium oxide. Only the one application was made during the first year with sorgo grown continuously for 3 years. The lime was applied on the surface when the plants were about 3 inches high and mixed with the surface soil with a garden rake.

A large increase in yield was secured from the lime compared to no-lime treatment every year. Although the acre yields for both treatments were low, the mean increase of the lime treatment for the 3 years was about twice that of the no-lime treatment. In fact, the yield from the lime treatment was greater than that from any treatment used in the other experiments.

During the second and third year the effect of the lime on growth was easily noticeable as soon as the plants emerged and continued so until harvest. Further experiments are planned for additional information on rates and methods of application.

Sudan grass planted for hay on an adjoining field was similar in appearance to the unlimed sorgo crop. Several attempts to grow Sudan grass seeded broadcast for hay production in this area have been failures.

These experiments with sorgo and observations on Sudan grass indicate strongly the need for lime before attempting growth of these crops in southwestern Georgia.—E. S. Lyons, U. S. Sugar Plant Field Station, Cairo, Ga.

A TRACTOR-MOUNTED TWO-ROW NURSERY PLANTER

Obtaining good stands of cotton is one of the major problems of cotton production in the El Paso Valley. Persistent spring winds dry the surface soil very rapidly, often before the seeds have sufficient time to germinate. Hence, it is necessary to plant as rapidly as possible when the soil moisture reaches the right stage. Inasmuch as severe crusting and caking occur unless the soil is properly handled, dragging immediately following planting to prepare a dust mulch or subsequent harrowing is usually essential. Conventional nursery planters and hoes have not proved satisfactory for planting cotton nursery plots at the El Paso Valley Experiment Station. Neither has it been found satisfactory to open a furrow, drop, and cover the seed. Since two-row cultivating equipment is used almost exclusively, it is necessary to space the rows accurately. Nursery plots are often located on cooperating farms in small sections of commercial fields, making it

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