EFFECTS OF FERTILIZERS ON THE SEASONAL PRODUCTION OF PASTURES

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There are many carefully obtained data to support the common observation that hay and pasture plants make most of their annual growth early in the season. In fact, the luxuriance of pastures in June has long been a by-word. The uneven seasonal production of permanent pastures may be more readily appreciated if it is stated that, in general, grasses make about two-thirds of their annual growth in the first third of the season. Although the dates when the several species start growth in the spring or reach the period of greatest production vary considerably, there is not enough difference between them to affect importantly this common situation. Therefore, when in recent years, many trials demonstrated the marked effects of fertilizers in increasing the total yields of pastures, particularly pastures of the run out, permanent type, many also hoped a more uniform production could be obtained by proper fertilization. In respect to this important factor in pasture economy, this paper gives the results obtained during the past 5 years at the Storrs (Connecticut) Agricultural Experiment Station.

PLAN OF EXPERIMENT

The project in question was started in 1921 on a run down, brush-grown, permanent pasture. The soil is a sandy loam, with a compact subsoil, and is quite retentive of moisture. Locally, it is considered good “grassland.” The brush was removed and nine 4-acre plots were laid out and fenced on the area. After 3 years of preliminary grazing without treatment of any kind, each plot was fertilized differently in 1924. In most instances the mineral applications of 1924 were repeated in 1929 and nitrogenous fertilizers have been applied annually to some plots since 1926. These experimental

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