AN EVALUATION OF KENTUCKY BLUEGRASS

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Many times during the last 20 years, agronomists of the Northeast have spoken disparagingly of Kentucky bluegrass. Some of the shortcomings commonly mentioned are (1) low total yield; (2) little growth in midsummer; (3) unpalatable if not kept short; (4) strong competition for other species, especially legumes; and (5) fertile soils or liberal fertilization necessary.

The authors are among those who have emphasized the weak points of Kentucky bluegrass and have spent much time in testing other grasses. After many years of such work, considerable data have accumulated and these will be summarized in this paper. For the sake of brevity and because of the limited scope of the subject, only results from the "commercial" lots of seed of each species will be considered at this time.

SEASONAL AND TOTAL YIELDS

Four experiments involving Kentucky bluegrass and other grasses have been conducted for two or more years on fields of Charlton fine sandy loam soil on the Station Farm at Storrs, Conn. In the oldest experiment (No. 1 of this paper), nine grasses were sown in pure culture in September, 1935, on soil not limed since 1919 and which had a pH of 5.6 before seeding. Since 1936, duplicate plots of each grass have been exposed to six different treatments in addition to the general PK fertilization. These treatments are: (1) none, (2) Kent clover seeded, (3) ladino clover seeded, (4) nitrogen at 28 pounds in April, (5) nitrogen at 28 pounds in April and repeated in June, and (6) nitrogen at 28 pounds in April and repeated in June and August. In all cases, the vegetation was mowed when 4 to 5 inches high by a motor lawnmower set to cut 1 inch above the ground. Under this management, five of the nine grasses soon had such poor stands that their yields will not be presented here. Those five species were Canada bluegrass, Poa compressa, tall oat grass, Arrhenatherum, meadow fescue, Festuca pratensis, smooth brome grass, Bromus inermis, and perennial rye grass, Lolium perenne.

These and some of the following results corroborate data published by Wiggins in 1923.  

The seasonal and total yields of dry matter for the other four grasses under two different types of treatments are presented in Table 1. The data in the table show that, either with ladino clover or alone under intensive nitrogen fertilization, Kentucky bluegrass yielded fully as much dry matter throughout the season as Rhode Island bent grass, orchard grass, or timothy. During the later years...