SOME FACTORS AFFECTING THE PALATABILITY OF PASTURE PLANTS

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The practical importance of the palatability factor in the grazing of pastures is recognized by most herdsmen. However, most of the agronomical studies of pasture problems made in America have been concerned chiefly with the question of production. European workers appear to have given more consideration to the question of palatability, but pasture grasses important in Europe are not widely grown in the United States. Many workers on pasture problems have observed differences in edibility of different species of pasture plants grown under uniform conditions or the same species under different conditions; and some of these observations have been reported, but few organized attempts to determine the factors affecting palatability have been reported.

The palatability factor assumes special importance from the standpoint of species when selective grazing over large areas is practised, and from the standpoint of environment when soil amendments and fertilizers are used. This factor deserves special consideration in the pasture regions of the northeastern United States, where, on account of increasing use of the Hohenheim system or a modification of it, the seeding of tillable pastures is becoming more common; and especially because in this system rotational grazing is practised which permits the grass to grow taller than in many pastures continuously grazed.

REVIEW OF LITERATURE

White, et al. (8) summarized some observations of palatability of grasses made on the Preswick pasture at the Cornell University Agricultural Experiment Station as follows: "The order of palatability of the various grasses used in this pasture seems to be as follows: Smooth brome, timothy, meadow fescue, meadow foxtail, orchard grass (when young), Kentucky bluegrass, and redtop. The cattle have shunned the redtop wherever it grew, whether alone or in mixtures." They also pointed out that grass on plots which received nitrate of soda and lime were quite closely grazed except where redtop was the chief grass.

Piper (6), however, quotes results of a Cornell experiment, presumably those of the Preswick pasture, in which he reverses the order of timothy and Kentucky bluegrass. Further (page 177), he states that Kentucky bluegrass "is very palatable to all classes of livestock,

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3 Reference by number is to "Literature Cited," p. 128.