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RECOMMENDATIONS FOR PLANTING BERMUDA GRASS ON HIGHWAY PROJECTS

The information contained in this mimeographed circular is based on experiments conducted by the Georgia Coastal Plain Experiment Station in cooperation with the State Highway Department of Georgia designed to solve some of the problems connected with the establishment of a satisfactory stand of Bermuda grass from sprigs. Repeated experimental results indicate that the source of Bermuda sprigs, the care of sprigs from the time of digging until covered with moist soil, and the soil moisture content at the time of planting are three major factors contributing to the success or failure of the establishment of a good stand of grass. It is believed that the following suggestions will result in better stands of Bermuda grass from sprigging operations.

SOURCE OF SPRIGS

Bermuda grass in poor, worn-out soils makes very little growth as compared to that in naturally fertile fields. There is a question as to whether or not sprigs from poor, worn-out soil make sufficient growth to emerge and become established after sprigging. The results of 150 tests indicate that in practically every instance sprigs obtained from fertile fields grew more rapidly and produced noticeably more growth than sprigs obtained from worn-out fields. In many tests sprigs from fertile fields actually produced 7 times as much growth as those from worn-out fields during the same period of time. The average for all tests showed that sprigs from fertile fields produced 3½ times as much growth as those from worn-out fields. It was also observed that the small amount of growth from the sprigs obtained from poor soils was often not sufficient to insure emergence when planted at normal depth. This work indicates a definite advantage in obtaining sprigs from fertile fields.

CARE OF SPRIGS

As a result of the difficulty of eradicating Bermuda grass from cultivated fields, many people have accepted the idea that Bermuda sprigs are not damaged when exposed to direct sunlight. In view of this widespread belief, numerous experiments were conducted during the spring and summer of 1952 in which common Bermuda sprigs were exposed to direct sunlight for different periods of time (0 to 8 hours) before planting. At any time during the planting season, the growth of sprigs was reduced by exposure to sunlight. The greatest reduction in growth and stands, however, occurred during mid-summer. Exposure for only 2 hours during mid-day resulted in failure to obtain a satisfactory stand. No loss in stand or reduction in growth was obtained where sprigs were dug and kept shaded and moist until planting. The germination of exposed and non-exposed sprigs on June 26, 1952, was as follows: