

the Everglades. Promising selections of grasses were also established for observational purposes on the sandy soils of south Florida. In west Florida, Jeffers (11) compared the yields of Pensacola and Argentine bahiagrasses and Coastal bermudagrass under different levels of nitrogen fertilization. Pensacola bahiagrass responded best to higher nitrogen levels. Similar studies were conducted with pangolagrass and Pensacola bahiagrass (15, 18, 19, 20), napiergrass (3), St. Augustinegrass (4), and fescuegrass (16). Gammon and Blue (7) in 1952, and Gammon (8) in 1953, studied the requirements of various grasses for potassium. At the Range Cattle Experiment Station in central Florida, a general description of the various grasses commonly used in Florida was presented by Hodges, Jones, and Kirk in 1951 (10). The same workers (5) and McCaleb (6) have shown the pounds of beef per acre that might be obtained by grazing various permanent pasture grasses. In Gainesville (12), eight different pasture programs were compared for beef production, forage yields, and quality. An economic analysis was made of the various programs. Pangolagrass, Pensacola bahiagrass, and Coastal bermudagrass were used as permanent improved pasture grasses, while other programs included the use of clovers. Henderson (9) summarized the results of most of the grazing and clipping trials conducted by the Florida Agricultural Experiment Stations with the various grasses commonly used in central and north Florida. Included were the economics involved in the production of beef from these pastures.

Information on the production capacities of the various improved grasses now being used extensively in south Florida has been very limited. This study was primarily undertaken to compare yields, crude protein levels, dry matter contents, and crude protein contained in harvested forage of several of the improved pasture grasses now being used in south Florida and of two other grasses.

Also, results were obtained on the effects of high rates of nitrogen and low rates of potassium fertilization, clipping heights, and weed competition. The experiment was conducted on Immokalee fine sand, which is typical of a large acreage of land now being used for grass production in south Florida.