

FACTORS AFFECTING COMPOSITION OF EVERGLADES GRASSES AND LEGUMES WITH SPECIAL REFERENCE TO PROTEINS AND MINERALS

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The Everglades peat area is unique in that practically all of its plants of economic and cultural value have been introduced and tested comparatively recently as to their adaptability and suitability in a new environment. Except for a narrow fringe of custard apple trees around the southern rim of Lake Okeechobee the area was formerly covered with a dense growth of the tall reed-like plant known as sawgrass, *Mariscus jamaicensis* (Crantz) Britt.

WATER CONTROL AND PLANT INTRODUCTIONS

Water control on these lands changed the environment profoundly and opened up the possibility of growing a wide range of cultivated plants. Thus the Everglades Agricultural Experiment Station, which is located on an area typical of this expanse of Everglades peat, has within its brief existence of 21 years introduced hundreds of different kinds of plants such as vegetables, grasses, legumes, forage, fiber and rubber plants, herbs, shrubs and trees. Because of the sub-tropical nature of the region the range of plant growth possibilities is wider than usual and material is being obtained for testing from both tropical and temperate zones. By means of controlled crossing and selection new varieties of sugarcane, corn, vegetables and grasses have been and are being produced which are better adapted to Everglades peat that has been placed under water control.

The earlier experiments with grasses and legumes were for the purpose of testing the growth characteristics of a selected list of varieties in this comparatively new environment. A descrip-

¹ The late Dr. A. Daane selected and planted the grasses and legumes that were used in these experiments. Mr. John Newhouse assisted with the harvesting and sampling and Messrs. John Colvert, P. W. McIntire and L. S. Jones with the analytical work.