

INTRODUCTION.

In the wet tropics the climate is favourable to the production of bulky fodder crops, but less favourable to the production of concentrates. Hence it is cheaper to feed the locally grown fodder and the producer must make the best possible use of such feeds. In the absence of more knowledge the uninformed person is liable to compose an improperly balanced ration when handling his fodder, or to use the limited material available in an uneconomical fashion.

Much work has been done in temperate regions on the digestibility of most common feeding stuffs fed to animals. Far less work has been done in this direction in the tropics, and therefore little critical information is available on the digestibility of tropical grasses. Of the work which has been done, chemical analysis has largely formed the basis for estimating the feeding value. Due to the variation in amount of the digestible wastage of a feed, the determination of its digestible nutrients is an advance on the information gained by chemical analysis alone. The digestibility trial is considered to be the foundation on which basic fodder research can be further developed in different directions, by Van Wyk et al. (1951). The digestibility trial supplies information concerning the nutrition value of the food, & the percentage of the nutrients assimilated by the animal. This information can be used in computing stock rations. Only by scientific feeding can an animal be expected to achieve the maximum production of which it is genetically capable.

With this in mind, a series of digestibility trials has been arranged, in which various species of local herbage are fed at different stages of growth. This project consists of three

trials, feeding Guatemala grass at four, eight and twelve weeks of age. The information obtained, apart from its own value, will be used in the calculation of a concurrent digestibility trial, feeding Guatemala grass of these ages, together with ammoniated tropical by-products.