

THE GRASSES OF TRINIDAD, WITH SPECIAL REFERENCE TO
FODDER TYPES.

INTRODUCTION

The initial step in any policy for advancing animal husbandry within the tropics should be an enquiry into the nutritional status of the available herbage.

In many cases the dictum 'all flesh is grass' has been disregarded with the consequence that animal improvement schemes have come to naught; the folly of such a procedure is now generally recognised.¹

As far back as 1894 Kew had prepared lists of recommended fodder grasses (including Guinea and Para grass) and these were added to in succeeding years; in 1912 the merits of Elephant grass were noted: Kew was instrumental in distributing these proven grasses which more or less eclipsed indigenous species, the new grasses being reliable and the seed readily obtainable.

This was unfortunate, for indigenous grasses are not invariably inferior to the popular types; in some respects they may even surpass them² (as in the case of Para grass with its reasonably high protein content.) For a period then interest in indigenous types waned but has now been reawakened by the urgent need for stimulating animal production to serve nutritional and soil conservation purposes; thus Sir Frank Stockdale³ in connexion with the fodder problem of Palestine has said "While a certain amount of improvement can be effected by the introduction of exotics, it is to be expected that the greatest benefit is likely to accrue from the encouragement of certain plants of the natural herbage" a sentiment echoed by Sir George Stapledon⁴ who holds that each country should explore its own resources to the utmost.

The method of approach to the problem generally adopted consists⁵ of a preliminary botanical survey and collection of species for recognition of the species with notes on their autecology and possible utility, followed by an intensive ecological investigation; but this second step is employed usually when the improvement of natural grazing is the object in view. It seems that in Trinidad and the wet tropics generally the system of green-soiling is a better alternative than grazing⁶ for feeding stock; this is the method employed by the lesser stock owners who cut their fodder from traces and waste ground, and by the larger commercial firms who however cultivate selected fodder-grasses.

Intensive experiments on the relative merits of the common fodder species under differing conditions of management have been carried out⁷ and have yielded a great deal of valuable information. They have also drawn attention to the botanical factors of importance in perennial fodder crops, these are:-

- (i) The nature of the growth habit.
- (ii) Persistence, the grass must be dominant or else suffers from weed competition.
- (iii) Ability to endure the dry season, and if possible to give keep in this period. Trinidad is fortunate in that cane tops are available for the greater part of the dry season but May and early June are critical periods.
- (iv) Disease resistance.
- (v) The grass should not become troublesome as a weed in later stages of the rotation. Rhizomatous species are undesirable on this account.

Nutritive value and palatability (of lesser importance than in pasture grasses) can be determined only by experiment but a rough guide is given by the amount of fibre in the leaf⁸.

Varietal differences express themselves chiefly through disease-resistance and growth habit; the latter is of great weight as investigations in South Africa have shown⁹.

The investigation is an appraisal of the native grasses due regard being placed on the fore-going points.