

## INTRODUCTION

In order to promote maximum efficiency in the grazing of livestock, it is necessary not only to provide the animal with an optimum amount of the best possible herbage, but also to present this herbage in the most acceptable form and also at the time when the animal will make most use of it.

It is only in recent times that the concept of regular behaviour patterns in dairy cattle has been appreciated, and with it the idea of designing systems of grazing management that will let the cow graze when it feels most inclined to graze, thus increasing the efficiency of the grazing animal.

Attention has been focussed on this aspect of animal husbandry in America, the United Kingdom and particularly in New Zealand. As far as the Tropics are concerned there has been virtually no work done at all, with the exception of one isolated experiment in Fiji.

At the present time the standard of animal management in the Tropics, generally speaking, has not yet reached the stage where such refinements in the systems of management are of much importance. However, it was felt that an investigation into the grazing habits of dairy cattle in the Tropics would be of value in view of the rate at which tropical agriculture is developing, as well as the fact that in view of the extreme youth of the study of the grazing behaviour of cattle, it will take a considerable time before the knowledge obtained can be put into practical application.

In addition, it was hoped that this investigation would throw some light on the relatively poor performance of Dairy cattle in the Tropics.

This project is the first of a series which it is proposed to carry out at the Imperial College during the next few years. Consequently this year's experiment is aimed at

the collection of Base line data and the investigations are necessarily of a preliminary nature. Due to this fact several mistakes have been made this year, as is practically inevitable in this kind of investigation, but at least this year's work will be of value in indicating the more profitable lines of approach that may be taken up in future.

When considering the results of this experiment, it should be remembered that they are somewhat limited in their application due to the rather limited nature of the experiment. In fact, this project is intended as a preliminary investigation and does not pretend to immediate practical application.