This report is a survey of milk production from cattle, and its various aspects in Trinidad. It was allocated to the writer to form part of his course as a refresher student at the Imperial College of Tropical Agriculture, and carried out under the guidance of Professor Harrison, who suggested methods for obtaining information. The object is to obtain information regarding the present position of dairying in Trinidad, with especial attention given to breeding.

The investigation, though it entailed visits and enquiries over the western half of the island, was mainly confined to districts within ten miles of Port of Spain, where some two hundred visits were paid in approximately one hundred and seventy hours, and about five hundred miles travelled by car. Visiting commenced in November 1939, and continued at intervals till June 1940.

Dairying, especially in Trinidad, presents an infinite variety of interesting problems, facts and conjectures for study, and is an industry to which much attention should be paid, especially when it is learnt that well over £100,000 worth of condensed milk is imported annually. This report will be confined mainly to breeding, feeding and management, with particular attention to stocks used. These three points go hand in hand, and though management and feeding are extremely important, without the animal they are useless.

Trinidad.

Trinidad lies ten degrees north of the equator, and is therefore tropical; it has a fairly even temperature varying around eighty degrees Fahrenheit throughout the year. There is a wet and a dry season, the latter normally extending from February till May, though for the last few years these have not been so definite as might appear from their names.

The island is mainly agricultural, consisting of estates which were originally from six hundred to eight hundred acres each in extent; now some have combined either privately or by companies to form estates of several thousands of acres, while others have been subdivided to give the small peasant holdings; this accounts for the smallest units dealt with being grouped in different areas. The small size of these holdings is due to the estate owners, when the slaves were freed, putting up the price of land and limiting the amount bought to less than could give a livelihood, so that the estates were assured of labour. However at present most estates are making increased use of mechanical appliances, and so reducing the need for labour, thus not only will land settlement be more favourably regarded, but there will be an increasing demand for such schemes.
East Indians, who originally came to Trinidad as indentured labourers, usually are the owners of peasant stock, as other types are said to be generally too lazy to give the constant attention which all livestock require. These people number one third of the total population of the island.

Review of Literature.

Few direct references to the dairying industry in Trinidad were found apart from two addresses by Capt. H. V. Metivier (1, 2), two publications by Dr. Shannon, one of his assistants (3, 4), part of a report by Professor Hammond (5), and Professor Wood's book on cattle in the tropics (6).

Reports and reviews of the various agricultural and veterinary departments of India, Africa, the Phillipines and the United States, were read as well as a miscellany of articles in the different dairying and genetics publications, hoping to find that a certain method of breeding was being successful in different tropical countries. However, it appeared that in Texas the Zebu was being used to improve European blood, in Nigeria grading with European stock had so far failed, in South Africa the Cape cow had been evolved from the Dutch Friesian and the Afrikander, although good herds of pure European stock were doing very well there. The Military Dairies in India have not been too successful with the Zebu-Ayrshire crosses they were using; but the milk strain selected from the Sahiwal is making a name for itself. These were used as foundation stock, not because they were any better than others, but because they were on the spot and not too expensive—no reference can be found to substantiate this.

There are three schools of thought as to the best method of establishing a tropical dairy strain. Professor Hammond recommends grading up local stock with European bulls; others with experience in India believe that grading up will only lead to failure and that selection should be purely within the local foundation stock, as has been done with the Sahiwal. A third group believe that the milk strains of the Murrah water buffalo should be intensified, as these animals are already acclimatised and show a capacity for producing milk. Here in Trinidad, there are herds of water buffalo, Friesians, Zebus, various other European crosses and the heterogenous mixture of the peasants, so that information regarding these in the island is increasing, though not recorded.

There is no reason why every one of these methods should not be successful, but unless one method is strictly adhered to, no result of any value will be obtained.

It should be remembered that there is an urgent demand for milk now, and not about to be in a number of years, also that as much use as possible should be made of existing stocks with as great economy as possible, without harming any scheme.