

THE USE OF MANURES AND FERTILIZERS INGRENADA.

oooooooooooooooo

INTRODUCTION

This being a 'reading project', the information written has been obtained from previous workers whose ideas and interpretations have been written and published. In many cases, relevant or more detailed information required could not have been obtained and further, many aspects of Grenada's Agriculture such as system of cultivations, manuring etc., have not been published or recorded in the Annual Reports or Bulletins of the Department of Agriculture in Grenada. It is felt therefore, that this subject could have been tackled more successfully by someone on the spot, where one could have talked and discussed various aspects of the subject with the peasants and agricultural staff of Grenada.

The main crops of the island are taken individually and dealt with in turn. Although the subject of the paper is "The use of Manures and Fertilizers", it has been found necessary to make reference to other cultural techniques employed in the husbandry of the crops, as it is accepted that although manures and fertilizers will, if correctly applied, increase crop-yield, they cannot however, give maximum results if other cultural operations are limiting.

The economic use of fertilizers in the West Indies is still in its infancy. Even with the more developed crops of sugar-cane and cacao, there is still scope for improvement, and not until the ecology and soil conditions of the crop in question have been fully understood, can the full use of fertilizers be made.

With the increasing world population and previous land exploitation, the need for skilful use of fertilizers to augment soil fertility and raise production is desirable. Grenada with

population density of 656 people per square mile, definitely requires an intensive system of agriculture into which the use of manures and fertilizers, especially the latter, will find its place.

The island is situated between the parallels $12^{\circ} 30'$ and $11^{\circ} 55'$ and the meridians $61^{\circ} 30'$ and $61^{\circ} 35'$ longitude. It is 21 miles long, 12 miles at its greatest breadth and approximately 180 square miles. The island is mountainous and picturesque. The mountains are volcanic in origin, range from north to south having several lofty peaks, the highest being Mt. St. Catherine - 3725 feet.

In section, the island is asymmetrical, sloping gently to the east and southern coasts, but ending in steep cliffs on the western side of the island. Rivers and spurs radiate from the central range and it is on the foothills of these that most of Grenada's sugar is grown.

The climate of Grenada is mild with an irregular alternation of dry and wet seasons. Generally, December to May is dry. Table I gives the average rainfall of some of the main producing estates of Grenada. The figures are obtained from records given in the annual reports of the Government of Agriculture.

TABLE I

ESTATE	CROP	NO. OF YRS.	RAINFALL IN INCHES	LOCATION
Armadale	Cocoa, Pimento	50	142	S.W.
Brookside	Mango, Cocoa	37	178	Central
Longdale	Cocoa, Pimento	23	131	S.W.
Paradise	Cocoa, Pimento, Cane	14	74	S.W.
St. John's	Cane	4	42	S.W.
St. Mark's	Cocoa, Pimento, Cane	2	24	E. Central
St. Peter's	Cocoa, Pimento	7	45	S.
St. Thomas	Mango, Cane	20	140	E. Central
St. Vincent	Cocoa, Pimento	2	112	S.
St. George's	Cane	4	28	S.