I. INTRODUCTION.

The problem of the disposal of surplus final molasses exists in most sugar producing countries where the demands for the by-product for stock food, alcohol production and fuel are inadequate to absorb the supply. In Trinidad despite a relatively large population of working oxen and other cattle, large quantities of molasses are run to waste each year. Analyses show the potential value of molasses as a manure but as yet little is known of its possibilities in this direction. Could its manurial value be established the returns of the sugar factories might be increased and the agriculture of the country rendered less dependent on imported fertilizers. It is the purpose of this investigation to consider the difficulties confronting a prospective use of molasses and to see what crop response may be expected when the by-product is employed as a general manure.

Further evidence of success with the manure comes from Mauritius. Tempany (9) states that sugar cane is dressed with molasses as a general farm practice in that island. He estimates that in a period of five seasons an increased production of twenty tons per acre of sugar cane can be expected from a single application of five tons of molasses. He also quotes forty-eight experiments conducted on eight estates where a mean increase of 2.9 tons per acre was obtained from an application of molasses equivalent to 60 lbs. K₂O, 60 lbs. K₂O, and 40 lbs. P₂O₅. Similar experiments with farmyard manure applied at a rate equivalent