

INTRODUCTION.

MITSCHERLICH'S METHOD

Professor E. A. Mitscherlich has evolved a method of assessing the nutrient status of soils by a growing plant. His method has met with great practical success in Germany and as a result it has been tried out in other countries, notably the British Isles. There are small Mitscherlich research units in Aberdeen, Belfast and at Rothamsted. As these places have a climate and crops differing little from these in Germany the exact method as used by Mitscherlich himself is being tested. If the method, however, is to be applied to tropical soils certain modifications of the original method are essential. The first of these modifications is that a new indicator, or experimental, plant has to be found as Mitscherlich used oats which will not grow in the tropics. The work carried out by Milburne (1) and Coombs (2) at this College last year showed that a special unit strain of Sudan Grass gave most promise as an indicator plant for the tropical soils and conditions. This grass has also been found most suitable by Cooke (3) working in Hawaii where the method seems to be proving very successful and is giving very good results for sugar cane soils. No mention, however, is made in the literature published by the Hawaiian workers of what modifications if any are necessary in interpreting results obtained using Sudan Grass as compared with what might be called the standard method using oats in a temperate climate. The work carried out here this year has attempted to discover whether or not any modifications are necessary and if so what they are.

$$\log 100 - \log (100 - y)$$