

I. INTRODUCTION

Chlorotic Streak disease of sugar cane was first recorded by WILBRINK (1929) in Java under the name of "fourth disease". It was also found in Australia by BELL (1929) and in Hawaii by MARTIN (1930). Since then it has been recorded in Mauritius (SHEPHERD, 1933), Puerto Rico (MARTIN, 1935), Louisiana (ABBOT, 1938) and in British Guiana (STEVENSON, 1951).

According to WIEHE (1951) the losses brought about by Chlorotic Streak can be summarised thus :-

- (a) Failure of setts to germinate, resulting in poor stands of cane
- (b) Retarded growth in the course of development of the cane stool
- (c) Irregular springing of ratoon canes

The disease is characterised by the appearance of yellowish streaks varying in length from a few inches to the entire length of the leaf. Being of virus origin it is a systematic disease so that the buds of an infected stalk give rise to diseased shoots (although it is not transmitted by knives during the preparation of setts or when fields are harvested (WIEHE, 1951)).

It was early found by BELL (1933) and other workers that hot water treatment of cane at 52°C for 20 minutes controlled the virus and resulted in increased germination and greater yields. Although WIEHE (1951) considers that in view of the large number of cuttings normally used, heat treatment is not economically worth-while, it is a standard practise on certain plantations in Hawaii (MARTIN and CONANT, 1939).