

I. INTRODUCTION.

The mosaic disease of cowpea (Vigna unguiculata (Linn.) Walp.) is well known and widespread in Trinidad. It affects to a varying degree the varieties grown but 100% infection is not uncommon in any variety. Despite this fact no statistically designed experiment has been carried out to estimate the effect of the virus on the yield or to determine whether it is economically worth while to control the disease. With this specific object a field trial was laid out and at the same time other experiments were carried out to investigate various other aspects of the disease.

II. REVIEW OF LITERATURE.

Cowpea mosaic was first recorded in Trinidad by Briant and Martyn in 1928. From a visual assessment they did not consider that the disease affected the yield markedly. Pickles and Thorold (1929) made an attempt to estimate the effect on yield by correlating the yield in pounds and the number of plants affected at the end of the season. Their results were negative and they deduced that the effect of the disease is negligible. Their analysis however, did not take into consideration the time of infection, which is important, for as they themselves discovered, infection has little effect after the pods have been formed.

Dale (1943) gave the symptoms and host range of the virus and in 1949 gave a detailed study of the virus and its relationships. He did not however investigate the effect on yield but urged the necessity for this to be done. In 1953 Dale gave more information concerning the mode of transmission and the vector (Ceratoma ruficornis).