1. **Introduction**

A serious disease of maize (*Zea Maize Linn.*) was first noticed on the Imperial College farm and elsewhere in Trinidad in 1929. Since then it has occasioned serious losses, especially during the past year in which the average yield of the maize crops on the College farm planted in December 1932 has been reduced by over 1000 lbs per acre.

Maize is not an important crop in Trinidad, and with the exception of the College farm is only grown in small patches. It is more than probable that the disease existed in the island before 1929, but was overlooked until it attacked the comparatively extensive maize cultivations at the College.

The disease has been under investigation at the College since 1929 in which year it was first described for Trinidad by Larter and Russell (1). They described the symptoms of the disease but came to no definite conclusion as to its nature. The disease has been the subject of further investigation during the past year.

2. **Previous work on Maize Virus Diseases**

In 1917 Weston (2) reported a yellowing and dwarfing of maize due to an unknown cause in the Phillipine Islands. His description is as follows: "The leaves upon unfolding were striped, mottled or marbled with yellow, the internodes were shortened, and the whole plant was somewhat dwarfed or deformed. In the worst cases the plants were barren, although seed of an inferior sort was borne by some". Weston had of course no knowledge of the virus diseases of maize, but it seems almost certain that he was dealing with one, and that not greatly different from the disease now found in Trinidad.

During the past ten years or so several diseases of maize, all attributed to organisms of a virus nature, have been described from the West Indies, Africa, the United States and Hawaii. The first of these, Mosaic disease of maize, was described by Brandes (3) in 1920 from Louisiana, Georgia and Porto Rico. The vector of this disease is *Aphis maidis Pitch* and it is inter-transmissible between maize and sugar-cane. He reported however, that it did little damage to maize, though it was serious on sugar-cane, and it is undoubtedly distinct from the Trinidad disease, hereafter called maize Stripe disease.