INTRODUCTION

In 1958 rapid wilting and subsequent death of cocoa trees was reported from several estates in the Northern and Central Ranges of Trinidad. By 1959 the condition was widespread throughout the cocoa growing areas of the island and was being regarded with concern.

Examination of the affected trees showed that the causative agent was the fungus Ceratocystis fimbriata (Ell. & Hals.) Elliot in association with beetles of the genus Xyleborus (Scolytidae). This fungus is known to cause a similar wilt disease of cacao in Costa Rica (Siller 1958), in Colombia (Idrobo 1958), in Venezuela (Malaguti 1952, 1958) and in Ecuador (Desrosiers 1958). It has a world wide distribution and is a recognised pathogen of rubber, coffee, coconuts and sweet potatoes (Chevaugeon 1957). In Trinidad it has only been reported on Crotalaria iuncua (Briant 1932) and as a minor pod rot of cacao (Baker 1932). There is no previous record of infection of the vegetative organs of cacao, although it was suggested by Quesnel (in Iton 1960) that the blast of cacao reported in 1727 in Trinidad and similar phenomena in other West Indian Islands during the period 1664 to 1892, were attributable to this wilt disease rather than to hurricane damage as had been suggested in the past.

RESEARCH IN TRINIDAD

Investigations into the nature of the disease and the biology and possible interrelations of the fungus and beetles were initiated by Mr. E. F. Iton of the Regional Research Centre at the Imperial College of Tropical Agriculture (U.C.W.I.), Trinidad, and his preliminary observations are described in Iton 1959 & 1960. These findings form the substance of this introductory section.

* The correct name of this fungus is Ceratocystis fimbriata (Ell. & Hals.) but that cited is the more commonly used.