

INTRODUCTION

Prior to the present investigation Euxesta stigmatias Loew was the only species of the genus known to attack maize, though indications that at least one other species occurred on maize in Trinidad had been obtained by Brown in 1953. Virtually nothing was known about the life histories of the species attacking maize in Trinidad and, as will be evident from the review of the literature on the genus, very little about that of any species in other countries.

The intention of the present investigation was therefore to ascertain what species were present on maize in Trinidad, to work out the life histories of at least any that proved to be common, and in particular to endeavour to elucidate the following points: whether the larvae are primary pests, or usually or always follow attack by other insects; whether tight-husked cobs are less susceptible than loose-sheathed varieties; whether, as had been suggested by Brown, bagged cobs are more liable to attack and, if so, why; whether the fly has any alternative host plants in Trinidad and, if not, how it carries over the season when little or no maize is available; and, finally, to ascertain the biotic and other factors that control the level of population.