

ABSTRACT

Ecological Studies on a Thrips Pest of Sugarcane in Trinidad

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The sugarcane thrips Fulmekiola serrata (Kobus), is a relatively new pest in Trinidad, the first identifications being made in 1982. The extensive drying of the leaves of young sugarcane plants attacked by this insect prompted interest in its ecology. Field studies were done in a sugarcane field at Waterloo, Caroni. Laboratory studies and an experiment were conducted at the University of the West Indies, St. Augustine. The life cycle of this species is typical of the Thripinae and is completed in 14 - 17 days, but the species is unusual in that pupation takes place on the leaves. Identification of sex is facilitated by the fact that females are larger and more darkly pigmented than the males. Additionally, the last abdominal segment is pointed in females and rounded in males. Seasonal abundance is more dependant on condition of the plant rather than on events on the crop such as rainfall, burning and application of insecticides. The highest density of thrips (average 59 thrips per plant) occurred in late April and the lowest was reached in August. F. serrata is aggregated on its host plant Saccharum officinarum (index of

aggregation = 1.41), all stages being found only in the central whorl of leaves. Distribution of thrips in the field was patchy. Plant age was found to exert a greater influence on population abundance than plant height.

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