

ABSTRACT

*Symmetrischema capsica* (Bradley and Povolny) is a common pest of peppers in Mexico, the United States and the Caribbean, where it attacks the bud of the three *Capsicum* species.

In Trinidad and Tobago it is attacked by six parasites and four predators. Descriptions are given of the bionomics of the pest and its parasites.

Culture methods for *S. capsica* were studied, since these are important in the mass-production of parasites.

Fruit-formation in *Capsicum* spp. was briefly studied. This is known to be important in assessing economic loss as a result of bud-damage.

The ecology and natural control was studied, emphasis being placed on the factors affecting *S. capsica* and its parasites in the field.

The results are discussed; at very high densities, populations on host plants such as *S. capsica* where the number of larval niches is important, may be limited by lack of suitable buds. Parasites and physical factors, however, play a major role in regulating the size of populations.

It is suggested that in Trinidad and Tobago, parasites restrict the increase of host-populations and that if the parasite complex was increased, by the introduction of species from foreign countries, a further reduction in economic loss might be achieved.