ABSTRACT

The Effect of Some Physical and Chemical Characteristics of Guava (*Psidium guajava*) on Fruitfly (*Anastrepha* spp) Infestation

Bibi S. Ali

At the end of the four month analysis of the various physical and chemical parameters that influence infestation of *Psidium guajava*, exocarp thickness and mesocarp firmness were the only two variables that appeared to significantly influence the degree of infestation.

A decrease in exocarp thickness occurred with a corresponding increase in infestation whilst an increase in mesocarp firmness corresponded with a decrease in the degree of infestation. There appeared to be no relationship between the other parameters tested and the degree of infestation.

Anastrepha infestation ranged from 9.35 larvae per kilogram to 122.71 per kilogram, although many of the samples were apparently uninfested. *Anastrepha striata* accounted for 94.03% of the infestation whilst *Anastrepha obliqua** accounted for 5.07%.

Male occurrence accounted for 52.4% of the total emerged fruitfly population - 53.97% in the *A. striata* and 25.0% in the *A. obliqua** population, respectively. The duration of the larval and pupal stages each averaged 2 weeks. No parasitoids of the fruitflies were observed.

---

* Tentative identification.