

Growth and development of *Bactrocera Papayae* (Drew & Hancock) feeding on guava fruits.

ABSTRACT

Asian Papaya Fruit Fly, *B. papayae* (Drew & Hancock) undergoes four stages (egg, larva, pupa and adult) during its growth and development. In this study, observation showed that the egg's stage took 1.16 ± 0.00 , larva's stage took 12.02 ± 0.13 and pupa's stage took 7.03 ± 0.08 days before the emergence of the adults. The male adult survived for 21.97 ± 2.69 days whilst the female 19.19 ± 1.50 days. It was observed that the eggs laid in a cluster, range between 10 - 50 eggs per cluster. The length and width of the individual egg observed were 1.12 ± 0.03 mm and 0.20 ± 0.00 mm respectively. The percentages of the survived individual larva decreased from the first instar until third instar. In the observation, the length and width of the larva reached 7.77 ± 0.08 mm and 1.84 ± 0.03 mm respectively. Pupae were observed changing in colour from pale yellow to dark brown. The length and the width of the pupae observed were 6.78 ± 0.16 mm and 2.90 ± 0.02 mm. The longevity of the adult *B. papayae* (Drew & Hancock) was influenced by the diets they consumed, the presence of other individuals, wideness of the areas, differences in times taken in different stages and temperature in the laboratory.

Keyword: *B. papayae* (Drew & Hancock); Egg stag; Larva stage; Pupa stage and adult stage.