

**FLUKTUASI POPULASI LALAT BUAH *Bactrocera carambolae*
Drew & Handcock (Diptera: Tephritidae) PADA KOMUNITAS
TANAMAN CABAI DI DUSUN TRINI, DESA TRIHANGGO,
KABUPATEN SLEMAN**

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ABSTRAK

Penelitian ini bertujuan untuk mengetahui pola fluktuasi lalat buah jantan; parasitoid lalat buah dan rasio seks lalat buah yang merusak buah cabai. Pengambilan sampel dilakukan di komunitas tanaman cabai Dusun Trini, Desa Trihanggo, Kecamatan Gamping, Kabupaten Sleman. Pengambilan sampel dilakukan dengan dua cara, menggunakan perangkap di lokasi penelitian dan memelihara buah cabai dari lapangan di Laboratorium Entomologi Fakultas Biologi UGM. Data disajikan dalam bentuk Tabel dan Gambar, serta dianalisis secara deskriptif. Hasil penelitian di lapangan menemukan tiga spesies lalat buah jantan yang terperangkap, *B. papayae*, *B. carambolae* dan *B. umbrosa*. Ketiga spesies tersebut berfluktuasi dari minggu pertama sampai minggu ke-14 pengamatan dan membentuk pola irreguler. Berdasarkan hasil pemeliharaan sampel buah cabai di Laboratorium Entomologi Fakultas Biologi UGM, ditemukan spesies lalat buah *B. papayae* dan dua spesies parasitoid, *Psytalia fletcheri* dan *Psytalia makii* yang memarasiti lalat buah *B. papayae*. Sebanyak 323 pupa lalat buah diperoleh dari hasil pemeliharaan sampel buah cabai. Sebanyak 69,04% pupa menjadi lalat buah dewasa, 6,50% pupa lalat buah terserang parasitoid, dan 24,45% pupa mati. Rasio seks lalat buah *B. papayae* pada pemeliharaan pertama dan kedua mengalami perbedaan. Rasio seks pada pemeliharaan pertama 1: 2, sedangkan pada pemeliharaan kedua 2:1. Perbedaan rasio seks dipengaruhi oleh kelimpahan buah cabai.

Kata kunci: lalat buah, fluktuasi, parasitoid, rasio seks

**THE POPULATION FLUCTUATION OF FRUIT FLIES
Bactrocera carambolae Drew & Handcock (Diptera: Tephritidae)
IN CHILI COMMUNITIES, DUSUN TRINI, DESA
TRIHANGGO, KABUPATEN SLEMAN**

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ABSTRACT

This study aimed to know fluctuation pattern of male fruit flies; parasitoid of fruit flies and sex ratio of fruit flies that damaged chili. Sampling was conducted in communities of chili plants in Dusun Trini, Desa Trihanggo, Kecamatan Gamping, Kabupaten Sleman. Sampling was conducted in two ways, by using traps in study location and rearing chili fruits from field in Entomology Laboratory, Biology Faculty of UGM. Data was presented by table as well as picture, and was analyzed descriptively. The result of field study found three trapped species of male fruit flies, *B. papayae*; *B. carambolae* and *B. umbrosa*. That three species fluctuated from first week to fourteenth week of observation and made the irregular pattern. The rearing chili fruits in Entomology Laboratory, Biology Faculty of UGM found fruit flies of *B. papayae* and two species of parasitoid, *Psytalia fletcheri* and *Psytalia makii* that attacked fruit flies of *B. papayae*. An amount of 323 pupae of fruit flies was gotten from rearing of chili fruits. An amount of 69,04% pupae became adult of fruit flies; 6,50% pupae of fruit flies was attacked by parasitoid; and 24,45% pupae was died. Sex ratio of *B. papayae* fruit flies in first and second rearing had difference. Sex ratio in first rearing was 1:2, whereas in second rearing was 2:1. The difference of sex ratio was influenced by the richness of chili fruits.

Keywords: fruit flies, fluctuation, parasitoid, sex ratio