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**DETEKSI PELETAKAN TELUR LALAT BUAH Bactrocera carambolae Drew & Hancock (Diptera: Tephritidae)
PADA BERBAGAI UMUR BUAH CABAI RAWIT (Capsicum frutescens L.)**
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Universitas Gadjah Mada, 2022 | Diunduh dari http://etd.repository.ugm.ac.id/

INTISARI

Bactrocera carambolae Drew & Hancock merupakan salah satu hama buah cabai rawit. Serangan lalat buah pada buah cabai rawit dapat terhindar jika mampu mencegah lalat buah betina bertelur dalam buah. Namun data umur kritis buah cabai rawit diteluri oleh lalat buah belum tersedia. Penelitian ini dilakukan untuk mengetahui umur buah cabai rawit saat pertama kali diteluri oleh lalat buah *B. carambolae*. Deteksi peletakkan telur *B. carambolae* dilakukan pada umur buah cabai rawit 7, 14, 21, 28, 35, 42, dan 49 hari dengan menggunakan metode *choices-test* skala laboratorium. Berdasarkan pengujian yang dilakukan dapat diketahui bahwa peletakkan telur pertama kali *B. carambolae* pada umur buah cabai rawit 28 hari. Semakin tua umur buah cabai rawit rata-rata jumlah telur, larva, pupa, dan imago yang ditemukan semakin tinggi. Karena lalat buah tertarik meletakkan telur pada buah yang matang dengan warna buah merah, ukuran buah besar, dan tekstur buah lembut untuk perkembangan larva. Implikasi hasil penelitian dapat digunakan sebagai dasar dalam pengambilan keputusan tindakan pengendalian baik secara pencegahan (*preventive*) dan eradikasi (*reactive*)

Kata kunci: *B. carambolae*, deteksi, peletakkan telur

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ABSTRACT

Bactrocera carambolae Drew & Hancock is one of cayenne pepper pests. Fruit fly attacks can be avoided if we can prevent female fruit flies from laying eggs on fruit target. However, data on the critical age of cayenne pepper that could be infested by fruit flies is not yet available. This study was conducted to determine the age of cayenne pepper fruit when it was firstly infested by *B. carambolae* fruit flies. Detection of egg infestation of *B. carambolae* was carried out at the age of cayenne pepper 7, 14, 21, 28, 35, 42, and 49 days using the laboratory-scale choice-test method. The result showed that the first egg-infestation *B. carambola* was at the age of 28 days of cayenne pepper. The older the cayenne pepper fruit, the higher the average number of eggs, larvae, pupa and imago found. Those due to fruit flies are attracted to infest eggs on ripe fruit with red fruit colour, large fruit size, and soft fruit texture for larval development. The average number of pupae and imago is influenced by competition for food between larvae. Based on the tests carried out, it can be seen that the first egg-infestation *B. carambola* was at the age of 28 days of cayenne pepper. Implications of research results can be used as a basis for decision making on control measures both in preventive and reactive.

Key words: *B. carambolae*, detection, laying egg