

PENGARUH PEMBERIAN EKSTRAK DAUN PEPAYA PADA EKSKRETA AYAM BROILER TERHADAP JUMLAH POPULASI LARVA LALAT RUMAH (*Musca Domestica L*) DI DALAMNYA

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INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh pemberian ekstrak daun pepaya ke dalam ekskreta ayam broiler dengan tujuan untuk mengurangi pertumbuhan larva lalat rumah (*Musca domestica L*). Sebanyak 4500 gram ekskreta ayam broiler segar dikukus pada suhu 46,5°C, kemudian dibagi menjadi 6 perlakuan dengan ulangan sebanyak 3 kali dan setiap ulangan menggunakan 250 gr dan ditempatkan pada cawan sterofom. Enam perlakuan tersebut adalah P.0% (ekskreta tanpa penambahan ekstrak daun pepaya), P.5%, P.10%, P.15%, P.20% (ekskreta dengan penambahan konsentrasi ekstrak daun pepaya 5, 10, 15, dan 20%) sedangkan P.LT (ekskreta dengan penambahan larutan larvatox “obat pembasmi lalat” dengan konsentrasi 10% sebagai pembanding). Semua perlakuan ekskreta ditempatkan pada ruang pembiakan berukuran 180x40x33 cm (PxLxT), kemudian dimasukkan lalat rumah dewasa sebanyak 200 ekor ke dalam ruang pembiakan selama 3 hari, setelah itu lalat dilepaskan, dan cawan sterofom yang berisi ekskreta tetap berada di ruang pembiakan selama 3 hari, selanjutnya dilakukan penghitungan larva pada ekskreta tersebut. Data yang diperoleh meliputi jumlah larva lalat rumah, kadar air, kadar C, kadar N, kadar C/N rasio, dan bahan organik. Data dianalisis secara statistik dengan analisis variansi dari Rancangan Acak Lengkap Pola Searah, apabila menunjukkan perbedaan, dilanjutkan dengan uji beda mean dengan uji *Duncan's Multiple Range Test*. Hasil penelitian menunjukkan jumlah larva pada ekskreta berbeda tidak nyata antar perlakuan P.0%, P.5%, P.10%, P.15%, dan P.20% dan jumlah larva berturut-turut yaitu 35,00; 26,00; 23,33; 16,00; dan 12,66. Kadar air pada ekskreta setelah dipakai untuk pertumbuhan larva menunjukkan hasil berbeda tidak nyata antar perlakuan P.0%, P.5%, P.10%, P.15%, dan P.20% berturut-turut yaitu 77,62; 75,68; 78,06; 77,79; dan 75,66%. Kadar carbon pada ekskreta setelah dipakai untuk pertumbuhan larva menunjukkan hasil yang berbeda nyata ($P < 0,05$) antar perlakuan P.0%, P.5%, P.10%, P.15%, dan P.20% berturut-turut yaitu 37,60; 31,32; 36,56; 40,87; dan 33,71%. Kadar nitrogen pada ekskreta setelah dipakai untuk pertumbuhan larva menunjukkan hasil yang berbeda nyata ($P < 0,05$) antar perlakuan P.0%, P.5%, P.10%, P.15%, dan P.20% berturut-turut yaitu 1,46; 1,31; 1,51; 1,46; dan 1,65%. Kadar C/N rasio yang dihasilkan pada ekskreta setelah dipakai untuk pertumbuhan larva menunjukkan hasil yang berbeda nyata ($P < 0,05$) antar perlakuan P.0%, P.5%, P.10%, P.15%, dan P.20% berturut-turut yaitu 27,82; 23,48; 24,97; 27,24; dan 23,72%. Kadar Bahan Organik, pada ekskreta setelah dipakai untuk pertumbuhan larva menunjukkan hasil yang berbeda tidak nyata antar perlakuan P.0%, P.5%, P.10%, P.15%, dan P.20% berturut-turut yaitu 76,72; 78,04; 77,71; 78,35; dan 69,91%. Kesimpulan dari penelitian ini adalah penambahan ekstrak daun pepaya ke dalam ekskreta ayam broiler dapat mengurangi pertumbuhan larva lalat rumah (*Musca domestica L*).

Kata kunci: Ekstrak daun pepaya, Ekskreta ayam broiler, Lalat rumah

THE EFFECT OF GIVING PAPAYA LEAF EXTRACT INTO BROILER EKSKRETA ON POPULATION OF LARVAE HOUSE FLY (*Musca Domestica L*)

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ABSTRACT

The research was aimed to determine the effect of papaya leaf extract addition in to broiler excreta for reducing the population of house fly larvae (*Musca domestica L*). Total of 4500 grams of excreta of fresh broiler were sterilized by steaming at 46,5°C, then divided into 6 treatments with 3 repetitions and each replication consisted of 250 grams of sterile excreta and placed at styrofoam dishes. The six treatments were P.0% (excreta without addition of papaya leaf extract), P.5%, P.10%, P.15%, P.20% (excreta with the addition of papaya leaf extract concentration of 5, 10, 15, and 20%) and P.LT (excreta with the addition of larvatox solution with a concentration of 10% for comparison). All treatments were placed in chambers measuring 180x40x33 cm (LxWxH) than 200 *domestica fly* were inserted into the chambers during 3 days then the fly was released, and the excreta is still placed chambers for 3 days, then the larvae were calculated from the excreta. The data obtained were then analyzed statistically by using a Completely Randomized Design analysis, and followed with Duncan's Multiple Range Test. The results showed that the number of larvae population on excreta had not significantly differences between the treatments, the results were 35,00; 26,00; 23,33; 16,00; and 12,66 for the P.0%, P.5%, P.10%, P.15%, and P.20% respectively. The percentage of water content in the excreta showed had not significantly differences between the treatments, the results were 77,62; 75,68; 78,06; 77,79; and 75,66% for the P.0%, P.5%, P.10%, P.15%, and P.20% respectively. The percentage of carbon content in the excreta showed significantly differences ($P < 0.05$) between the treatments, the results were 37,60; 31,32; 36,56; 40,87; and 33,71% for the P.0%, P.5%, P.10%, P.15%, and P.20% respectively. The percentage of nitrogen content in the excreta showed significantly differences ($P < 0.05$) between the treatments, the results were 1,46; 1,31; 1,51; 1,46; and 1,65% for the P.0%, P.5%, P.10%, P.15%, and P.20% respectively. The percentage of C/N ratio in the excreta showed significantly differences ($P < 0.05$) between the treatments, the results were 27,82; 23,48; 24,97; 27,24; and 23,72% for the P.0%, P.5%, P.10%, P.15%, and P.20% respectively. Percentage of Organic Matter in the excreta showed had not significantly differences between the treatments, the results were 76,72; 78,04; 77,71; 78,35; and 69,91% for the P.0%, P.5%, P.10%, P.15%, and P.20% respectively. It can be concluded that the addition of papaya leaf extract in to broiler excreta can suppress the growth of house fly larvae (*Musca domestica L*).

Keywords: Papaya leaf extract, Broiler excreta, *Domestica fly*