

PENGARUH VARIASI PAKAN SERTA KETEBALAN MEDIA TERHADAP KELULUSHIDUPAN LALAT TENTARA HITAM

(*Hermetia illucens* L.)

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ABSTRAK

Penelitian tentang *Hermetia illucens* telah banyak dilakukan, baik sebagai biokonversi maupun untuk dijadikan pakan alternatif bagi hewan ternak seperti unggas dan ikan. Larva *H. illucens* memiliki kandungan nutrisi protein yang mencapai 45-50% dan lemak 24-30%, sehingga larva ini berpotensi dijadikan sumber pakan alternatif yang bernutrisi tinggi. Penelitian ini bertujuan untuk mengetahui pengaruh variasi pakan serta ketebalan media terhadap kelulushidupan *H. illucens*. Media pemeliharaan yang digunakan yaitu limbah daun kayu putih, ampas tahu dan pakan ayam sebagai media pakan. Penelitian ini menggunakan metode eksperimental rancangan acak lengkap (RAL), dua faktorial yaitu variasi pakan dan ketebalan media yang masing-masing diulang sebanyak tiga kali pengulangan sehingga terdapat 27 unit percobaan. Hasil penelitian ini dianalisa menggunakan varian (ANOVA). Hasil penelitian yang dilakukan menunjukan bahwa pada perlakuan kelulushidupan *H. illucens* terendah terdapat pada perlakuan limbah daun kayu putih di media tipis dan hasil kelulushidupan tertinggi terdapat pada perlakuan pakan ayam di media tebal. Bobot terbesar terdapat pada perlakuan pakan ayam sebesar 64,31 mg pada media sedang dan bobot terendah terdapat pada perlakuan limbah daun kayu putih sebesar 4,40 mg di media tebal. Jumlah kelulushidupan *H. illucens* tertinggi terdapat pada perlakuan pakan ayam dengan ketebalan sebesar 60,67% dan kelulushidupan terendah terdapat pada perlakuan limbah daun kayu putih sebesar 0,33% di media tipis. Dapat disimpulkan bahwa variasi pakan dan ketebalan media berpengaruh terhadap kelulushidupan *H. illucens*.

Kata kunci : *Hermetia illucens*, Ketebalan media, Variasi pakan, Kelulushidupan.

INFLUENCE OF FEED VARIATION AND MEDIA THICKNESS ON THE LIFE OF BLACK SOLDIER FLY (*Hermetia illucens* L)

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ABSTRACT

Much research has been done on *Hermetia illucens* both as a bioconversion and as an alternative feed for livestock such as poultry and fish. *H. illucens* larvae contain protein nutrients that reach 45-50% and fat that reaches 24-30%, so that these larvae have high potential and can be used as an alternative nutritious food source. This study aims to determine the effect of dietary variation and media thickness on *H. illucens* life. Maintenance media used are waste of Cajuput leaves, leaves, tofu pulp and chicken feed as feed media. This study used a completely randomized experimental design (RAL) method, two factorials, namely the variation of feed and the thickness of the media, each of which was repeated three times so that there were 27 experimental units. The results of this study were analyzed using variants (ANOVA). The results of the research showed that the lowest treatment of *H. illucens* life was found in the treatment of Cajuput leaves waste in thin thickness and the highest yield was found in the treatment of chicken feed in thick thickness. The largest weight was found in the treatment of chicken feed 64.31 mg at medium thickness and the lowest weight was found in the treatment of Cajuput leaves at 4.40 mg in thickness. The highest number of *H. illucens* survival was found in the treatment of chicken feed with a thickness of 60.67% and the lowest survival rate was in the treatment of Cajuput leaves waste of 0.33% in thin thickness. It can be concluded that the variation of feed and thickness of the media affect the lives of *H. illucens*.

Keywords: *Hermetia illucens*, waste, feed variation, survival.