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**Pengaruh Substitusi Tepung Ikan dengan Tepung Maggot Black Soldier Fly dalam Pakan terhadap Sintasan
dan Pertumbuhan Ikan Baung (Hemibagrus nemurus Valenciennes, 1840)**
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Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

INTISARI

Pengaruh Substitusi Tepung Ikan dengan Tepung *Maggot Black Soldier Fly* dalam Pakan terhadap Sintasan dan Pertumbuhan Ikan Baung (*Hemibagrus nemurus* Valenciennes, 1840)

Penelitian ini bertujuan untuk mengetahui pengaruh substitusi tepung ikan dengan tepung *maggot Black Soldier Fly* (BSF) terhadap sintasan dan pertumbuhan ikan baung. Penelitian ini menggunakan Rancangan Acak Lengkap dengan empat perlakuan dan tiga ulangan, yaitu P0 (pakan komersial (kontrol)), P1 (75% tepung ikan + 25% tepung *maggot* BSF), P2 (50% tepung ikan + 50% tepung *maggot* BSF), dan P3 (25% tepung ikan + 75% tepung *maggot* BSF). Ikan baung ukuran 7-9 cm dipelihara selama 30 hari dan diberi pakan sebanyak 5% berdasarkan biomassa per hari dengan frekuensi sebanyak dua kali sehari. Parameter yang diamati meliputi sintasan, pertumbuhan mutlak berdasarkan bobot dan panjang, laju pertumbuhan spesifik berdasarkan bobot dan panjang, *feed conversion ratio* (FCR), *protein efficiency ratio* (PER), serta kualitas air. Data dianalisis menggunakan IBM SPSS Statistics 27 melalui uji normalitas, homogenitas, analisis varian, dan uji lanjut *Dunnet* pada taraf kepercayaan 95%. Hasil penelitian menunjukkan bahwa substitusi tepung ikan dengan tepung *maggot* BSF tidak berpengaruh terhadap sintasan ikan baung. Namun, substitusi tepung ikan dengan tepung *maggot* BSF sebasar 75% berpengaruh terhadap pertumbuhan bobot mutlak dan laju pertumbuhan spesifik berdasarkan bobot, serta substitusi tepung ikan dengan tepung *maggot* BSF sebesar 50% berpengaruh terhadap laju pertumbuhan spesifik berdasarkan bobot. Berdasarkan hasil penelitian, tingkat substitusi tepung ikan dengan tepung *maggot* BSF sebesar 50–75% mampu meningkatkan pertumbuhan ikan baung.

Kata kunci: tepung ikan, tepung *maggot* BSF, ikan baung, sintasan, pertumbuhan

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ABSTRACT

The Effect of Fish Meal Substitution with *Black Soldier Fly Maggot* Meal in Feed on Survival and Growth of Baung Fish (*Hemibagrus nemurus* Valenciennes, 1840)

This study aims to determine the effect of substituting fish meal with *Black Soldier Fly* (BSF) *maggot* meal on the survival and growth of baung fish. This study used a Completely Randomized Design with four treatments and three replications, namely P0 (commercial feed (control)), P1 (75% fish meal + 25% BSF *maggot* meal), P2 (50% fish meal + 50% BSF *maggot* meal), and P3 (25% fish meal + 75% BSF *maggot* meal). Baung fish measuring 7-9 cm were reared for 30 days and fed 5% of their biomass per day with a frequency of twice a day. The parameters observed included survival, absolute growth based on weight and length, specific growth rate based on weight and length, feed conversion ratio (FCR), protein efficiency ratio (PER), and water quality. Data were analyzed using IBM SPSS Statistics 27 through normality tests, homogeneity tests, analysis of variance, and *Dunnet*'s advanced test at a 95% confidence level. The results of the study showed that substitution of fish meal with BSF *maggot* meal did not affect the survival of baung fish. However, substitution of fish meal with BSF *maggot* meal by 75% affected the absolute weight growth and specific growth rate based on weight, and substitution of fish meal with BSF *maggot* meal by 50% affected the specific growth rate based on weight. Based on the results of the study, the level of substitution of fish meal with BSF *maggot* meal by 50–75% was able to increase the growth of baung fish.

Keywords: fish meal, BSF *maggot* meal, baung fish, survival rate, growth