ABSTRAK

Ikan nilem salah satu ikan herbivora yang digemari dan dibudidayakan masyarakat Indonesia. Faktor penunjang pertumbuhan ikan untuk keberhasilan budidaya adalah pakan yang berprotein tinggi. Maggot BSF menjadi alternatif substitusi tepung ikan karena memiliki protein tinggi. Jenis pakan yang dikonsumsi ikan akan dicerna disaluran pencernaan. Mengetahui kemampuan dalam mencerna pakan tergantung pada aktivitas enzim pencernaan. Tujuan penelitian untuk mengetahui efek pemberian pakan maggot dengan jumlah pakan berbeda terhadap aktivitas enzim pencernaan (protease, lipase dan amilase) nilem (*Osteochilus vittatus*). 48 ikan nilem dengan berat 8,5 ± 2,4 gram dan panjang 8 ± 1,5 cm dipelihara di akuarium ukuran 55 x 35 x 40 cm selama 30 hari. Metode penelitian ini adalah RAL (rancangan acak lengkap), P1: pakan maggot 3% dari berat biomassa diberi satu kali, P2: pakan maggot 6% dari berat biomassa diberi 2 kali, P3: pakan maggot 9% dari berat biomassa diberi 3 kali, P4 pakan maggot 12% dari berat biomassa diberi 4 kali. Hasil menunjukan aktivitas protease dan lipase ikan nilem tidak berbeda nyata diantara tiap perlakuan ($P>0,05$) namun, berbeda nyata terhadap aktivitas amilase ikan nilem ($P<0,05$). Nilai aktivitas amilase tertinggi didapat di P1 2,257 ± 0,780 U/mg protein dan terendah didapat di P4 yaitu 0,544 ± 0,102 U/mg protein.

Kata kunci *: Aktivitas enzim pencernaan; Jumlah pakan; Ikan nilem; Maggot.*

ABSTRACT

Bonylip-barp the most popular and cultivated herbivorous fish in Indonesia. High-protein feed is supporting factors on fish growth for successful aquaculture. Black soldier fly as fish meal alternative substitution because it has high protein. Feed consumed by fish will digested in the digestive tract. To determine the digesting feed ability depends on the activity of fish digestive enzymes. Study aims to determine the effect of feeding black soldier fly with different feeding rate on the activity of digestive enzymes (protease, lipase and amylase) of Bonylip-barp (*Osteochilus vittatus*). 48 Bonylip-barp with a weight of 8.5 ± 2.4 grams and a length of 8 ± 1.5 cm were kept in 55 x 35 x 40 cm size aquariums for 30 days. This research method used RAL (complete random design), P1: 3% maggot feed of biomass given once, P2: 6% maggot feed of biomass given twice, P3: maggot feed 9% of biomass given 3 times, P4 maggot feed 12% of biomass given 4 times. Result showed there were no significant differences among protease and lipase activity of bonylip-barp between each treatment (P>0,05) but significantly different from amylase activity of bonylip-barp (P<0,05). The highest amylase activity was found at P1 2.257 ± 0.780 U/mg protein and the lowest is P4 0.544 ± 0.102 U/mg protein.

Key words *: Bonylip-barb; Black soldier fly; Digestive enzyme activity; Feeding Rate.*