

RINGKASAN

Ikan lele dumbo (*Clarias gariepinus*) merupakan salah satu jenis ikan lele yang banyak dilakukan budidaya karena memiliki pertumbuhan yang relatif cepat. *Eco enzyme* merupakan salah satu probiotik yang berasal dari hasil fermentasi bahan-bahan organik seperti sayuran, buah-buahan dan molase. Penelitian ini dilakukan di Pondok Pesantren Al Hikam Kemayoran Bangkalan selama 3 minggu di bulan November. Pengujian dilakukan dengan menggunakan metode eksperimental Rancangan Acak Lengkap (RAL) dengan jumlah ikan lele dumbo 20 ekor per galon dan menerapkan dosis *Eco enzyme* berbeda yang terdiri dari perlakuan A sebagai kontrol, perlakuan B 10 ml, perlakuan C 15 ml, perlakuan D 20 ml, dan perlakuan E 25 ml. Data yang diperoleh dianalisis menggunakan analisis ragam (ANOVA) dengan bantuan program *Statistical Program For Social Sciense* (SPSS) dengan uji lanjut Tukey HSD. Hasil perhitungan yang diperoleh mulai DOC 0 sampai DOC 21 berkisar yaitu *Total Suspended Solid* (TSS) secara berurutan pada masing – masing perlakuan berkisar berkisar (0.15 - 0.52 mg/L; 0.23 - 0.76 mg/L; 0.23 - 0.76 mg/L; 0.12-0.44 mg/L; 0.13-0.53 mg/L), Hasil *Total Organic Matter* (TOM) secara berurutan yaitu (231 - 269 mg/L; 222 - 267 mg/L; 243 - 269 mg/L; 243 - 267 mg/L; 246 - 268 mg/L), suhu masing – masing perlakuan berkisar 25°C-30°C, pH masing – masing perlakuan berkisar 7, Oksigen terlarut masing – masing perlakuan berkisar 5 - 6 mg/L. Panjang mutlak ikan secara berurutan yaitu (3.78 cm; 0.13 cm; 3.78 cm; 2.29 cm; 3.22 cm), Berat mutlak secara berurutan yaitu (5.85 gr; 5.16 gr, 3.67 gr; 4.05 gr; 5.88 gr), Hasil ADG masing – masing perlakuan secara berurutan yaitu (1.52 gr; 1.63 gr; 1.68 gr; 1.75 gr; 1.65 gr) *Survival Rate* (SR) masing – masing perlakuan secara berurutan yaitu (100%; 75%; 88%; 76%; 78%) dan hasil FCR secara berurutan yaitu (1.41; 1.55; 1.57; 1.65; 1.81). Hasil uji one way anova uji lanjut tukey untuk parameter *Total Suspended Solid* (TSS), *Total Organic Matter* (TOM), Pertumbuhan panjang mutlak ikan, dan pertumbuhan berat mutlak ikan memperoleh nilai sig

> 0.05 yang menunjukkan tidak ada pengaruh nyata dengan *Eco enzyme*, sedangkan untuk parameter *Survival Rate* (SR) memperoleh nilai sig < 0.05 yang menunjukkan terdapat perbedaan nyata terhadap *Eco enzyme*.

Kata Kunci : Ikan lele, *Total Suspended Solid* (TSS), *Total Organic Matter* (TOM), *Eco enzyme*, Budikdamber

African catfish (*Clarias gariepinus*) is one type of catfish that is widely cultivated because it has relatively fast growth. *Eco enzyme* is a probiotic derived from the fermentation of organic materials such as vegetables, fruits and molasses.

ABSTRACT

African catfish (*Clarias gariepinus*) is one type of catfish that is widely cultivated because it has relatively fast growth. *Eco enzyme* is a probiotic derived from the fermentation of organic materials such as vegetables, fruits and molasses. This research was conducted at the Al Hikam Kemayoran Bangkalan Islamic Boarding School for 3 weeks in November. The test was carried out using the Completely Randomized Design (CRD) experimental method with 20 African catfish per gallon and applying different doses of Eco enzyme consisting of treatment A as a control, treatment B 10 ml, treatment C 15 ml, treatment D 20 ml, and treatment E 25 ml. The data obtained were analyzed using *analysis of variance* (ANOVA) with the help of the *Statistical Program For Social Science* (SPSS) program with the Tukey HSD further test. The calculation results obtained from DOC 0 to DOC 21 ranged from *Total Suspended Solid* (TSS) sequentially in each treatment ranging from (0.15 - 0.52 mg/L; 0.23 - 0.76 mg/L; 0.23 - 0.76 mg/L; 0.12-0.44 mg/L; 0.13-0.53 mg/L), *Total Organic Matter* (TOM) results sequentially were (231 - 269 mg/L; 222 - 267 mg/L; 243 - 269 mg/L; 243 - 267 mg/L; 246 - 268 mg/L), the temperature of each treatment ranged from 25°C-30°C, the pH of each treatment ranged from 7, Dissolved Oxygen for each treatment ranged from 5 - 6 mg/L. The absolute length of the fish in sequence is (3.78 cm; 0.13 cm; 3.78 cm; 2.29 cm; 3.22 cm), the absolute weight in sequence is (5.85 gr; 5.16 gr, 3.67 gr; 4.05 gr; 5.88 gr), the ADG results for each treatment in sequence are (1.52 gr; 1.63 gr; 1.68 gr; 1.75 gr; 1.65 gr) *Survival Rate* (SR) for each treatment sequentially, namely (100%; 75%; 88%; 76%; 78%) and FCR results sequentially, namely (1.41; 1.55; 1.57; 1.65; 1.81). The results of the one way anova test of the Tukey advanced test

for the parameters of *Total Suspended Solid* (TSS), *Total Organic Matter* (TOM), Absolute length growth of fish, and absolute weight growth of fish obtained a sig value > 0.05 which indicated no significant effect with Eco enzyme, while for the parameter *Survival Rate* (SR) obtained a sig value < 0.05 which indicated there was a significant difference with *Eco enzyme*.

Keywords: Catfish, Total Suspended Solid (TSS), Total Organic Matter (TOM), Eco enzyme, Budikdamber