

PROBIOTICS ADDITION AND THEY EFFECT ON WATER QUALITY AND GROWTH RATE OF MUTIARA CATFISH LARVES AT BALAI PENGEMBANGAN TEKNOLOGI PERIKANAN BUDIDAYA (BPTPB) YOGYAKARTA ON JANUARY-FEBRUARY 2020 PERIODE

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ABSTRACT

Catfish aquaculture is one of the most developed aquaculture business because it's need less capital and relatively easy management. Mutiara catfish became the most popular strain to be reared recently. The purpose of this final project is to determine the effect of probiotics on water quality and growth rate of Mutiara catfish larvae at the Balai Pengembangan Teknologi Perikanan Budidaya (BPTPB), Cangkringan, Agromulyo, Yogyakarta Special Region. The data collection method were interviewing Asterina Wulan Sari as the person in charge for the nursery pond at BPTPB Cangkringan and direct observation. 1000 Mutiara catfish larvae were divided into three treatment ponds, consecutively: Control pond; Aquaenzym[®] pond; and Probio7[®] pond. Water quality parameters (Dissolved Oxygen (DO), pH, and temperature) were measured using Smart Water Quality Monitoring Device. The parameters were measured every day for three consecutive days. 30 pearl catfish larvae were sampled for the determination of growth rate parameters (absolute length and total weight) every three days started at 3 days age to 12 days age. The results showed that the addition of probiotics had an effect on increasing water quality parameters of water's DO (1.80%; 5.40%), water's pH (2.76%; 0.2%) and water's temperature changes (0.3%; 0.7%) compared to the control pond. It also increased the larvae's length (78.43%; 64.70%) and the total weight (2.0%; 1.0%) compared to the control pond. It could be concluded that the addition of probiotics might maintain the pond water quality and also improve the growth rate of Mutiara catfish larvae.

Keywords: Probiotics, mutiara catfish larvae, water quality, growth rate

PENGARUH PEMBERIAN PROBIOTIK TERHADAP KUALITAS AIR DAN LAJU PERTUMBUHAN LARVA IKAN LELE MUTIARA DI BALAI PENGEMBANGAN TEKNOLOGI PERIKANAN BUDIDAYA (BPTPB) YOGYAKARTA PERIODE JANUARI-FEBRUARI 2020

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INTISARI

Budidaya ikan lele merupakan salah satu jenis usaha perikanan yang semakin berkembang karena pemeliharannya relatif mudah dan modal usaha yang dibutuhkan relatif rendah. Salah satu jenis ikan lele yang banyak dibudidayakan adalah ikan Lele Mutiara. Tujuan dari penulisan Tugas Akhir ini adalah untuk mengetahui pengaruh probiotik terhadap kualitas air dan laju pertumbuhan larva ikan Lele Mutiara di BPTPB, Cangkringan, Argomulyo, Kec. Cangkringan, Kabupaten Sleman, Daerah Istimewa Yogyakarta. Metode yang digunakan yaitu wawancara dengan Asterina Wulan Sari sebagai Penanggung Jawab Kolam Pembibitan di BPTPB Cangkringan dan pengamatan langsung. 1000 ekor larva lele mutiara dibagi ke dalam tiga kolam perlakuan yaitu: Kolam Kontrol; Kolam Aquaenzym[®]; dan Kolam Probio7[®]. Parameter yang diamati yaitu kualitas air (*Dissolved Oxygen* (DO), pH, dan suhu) dan diukur dengan alat *Smart Water Quality Monitoring Devic*, pengambilan data parameter kualitas air dilakukan setiap hari selama tiga hari berturut-turut. 30 ekor larva ikan lele mutiara diambil untuk penentuan parameter laju pertumbuhan (panjang mutlak dan penambahan bobot total) per tiga hari mulai hari ke-3 sampai hari ke-12. Hasil pengolahan data menunjukkan jika penambahan probiotik berpengaruh terhadap peningkatan nilai DO air (1,80%;5,40%), peningkatan pH (2,76%;0,2%) dan perubahan suhu (0,3%;0,7%) terhadap kolam kontrol. Hasil pengolahan data juga menunjukkan jika penambahan probiotik juga berpengaruh terhadap kenaikan panjang larva (78,43%;64,70%) dan penambahan bobot total (2,0%;1,0%) dari kolam kontrol. Berdasarkan hasil data tersebut dapat disimpulkan bahwa pemberian probiotik mampu mempertahankan kualitas air serta meningkatkan laju pertumbuhan bobot dan panjang larva lele Mutiara.

Kata kunci: Probiotik, larva ikan lele Mutiara, kualitas air, laju pertumbuhan