

## **PENGARUH IMUNOSTIMULAN GAMAAIginF TERHADAP SINTASAN DAN PERTUMBUHAN IKAN NILA MERAH (*Oreochromis* sp.) YANG DIPELIHARA PADA SISTEM BIOFLOK RESIRKULASI**

Tujuan dari penelitian ini untuk mengetahui pengaruh pemberian imunostimulan terhadap sintasan, pertumbuhan dan FCR ikan nila merah (*Oreochromis* sp.) pada sistem bioflok resirkulasi. Penelitian ini dilakukan dengan menggunakan metode eksperimental dengan Rancangan Acak Lengkap (RAL) yang terdiri dari dua perlakuan, P0 adalah perlakuan system bioflok dan P1 perlakuan system bioflok dengan pakan imunostimulan. Setiap perlakuan terdapat 4 kali ulangan. Pemeliharaan ikan menggunakan bak fiber dengan diameter 1.5 m, tinggi 1 m dan kedalaman air 0.85 m. Jumlah ikan yang digunakan sebanyak 200 per bak. Pakan yang diberikan dengan dosis 3% dari jumlah biomassa dengan frekuensi pemberian dua kali dalam sehari pada waktu pagi dan sore hari. Parameter yang diamati pada penelitian ini adalah, pertumbuhan mutlak panjang ikan, pertumbuhan mutlak berat ikan, pertumbuhan mutlak tanaman, SGR panjang ikan, SGR berat ikan, sintasan, dan Food conversion ratio. Berdasarkan hasil dari penelitian ini dapat disimpulkan bahwa pemberian imunostimulan tidak berpengaruh nyata terhadap sintasan, pertumbuhan, pertumbuhan tanaman dan FCR ikan nila yang dipelihara pada sistem bioflok resirkulasi, karena tidak ada serangan penyakit. Perlakuan P0 mendapatkan hasil pertumbuhan berat mutlak ikan sebesar 34,1 gram, pertumbuhan panjang mutlak ikan sebesar 4,1 cm, SGR berat ikan sebesar 1,87 %, SGR panjang ikan 0,59 %, FCR sebesar 1,07, SR sebesar 94,9 %. Perlakuan P1 mendapatkan hasil pertumbuhan berat mutlak ikan sebesar 35,1 gram, pertumbuhan panjang mutlak ikan sebesar 4,0 cm, SGR berat ikan sebesar 2,00 %, SGR panjang ikan 0,59 %, FCR sebesar 1,03, SR sebesar 95,4 %.

Kata kunci : bioflok, FCR, imunostimulan, nila, pertumbuhan, probiotik, resirkulasi

## EFFECT OF IMMUNOSTIMULANT GAMMAAlginF ON SURVIVAL AND GROWTH OF RED TILAPIA (*Oreochromis* sp.) CULTURED IN A BIOFLOC RESIRCULATION SYSTEM

The purpose of this research was to determine the effect of application immunostimulant on survival, growth and FCR of red tilapia (*Oreochromis* sp.) in a recirculating biofloc system. This research was conducted using an experimental method with a Completely Randomized Design (CRD) consisting of two treatments, P0 was the treatment of the biofloc system and P1 the treatment of the biofloc system with feed supplemented with immunostimulant once every five days. Each treatment was done in quadruplicate. Fish were reared in fiber glass tank with a diameter of 1.5 m, a height of 1 m and a water depth of 0.85 m, with a rearing density of 200 per t. Feed given at a feeding rate of 3% of the total biomass with a frequency of two times a day in the morning and evening. Parameters observed in this research include absolute growth of fish length, absolute growth of fish weight, absolute growth of plant weight, SGR of fish length, SGR of fish weight, survival, and food conversion ratio. Based on the results of this research, it can be concluded that the application of immunostimulant did not affect significantly on survival, growth of fish, growth of plant and FCR of tilapia cultured with resirculation bioflok system, as there was no any diseases outbreak. The P0 treatment resulted in an absolute growth of fish weight of 34,1 grams, an absolute growth of fish length of 4,1 cm, an SGR of fish weight of 1,87%, an SGR of fish length of 0,59%, an FCR of 1,07, an SR of 94,9%. The P1 treatment resulted in an absolute growth of fish weight of 35,1 grams, an absolute growth of fish length of 4,0 cm, an SGR of fish weight of 2,00%, an SGR of fish length of 0,59%, an FCR of 1,03, an SR of 95,4%.

Key word : biofloc, FCR, growth, immunostimulant, probiotic, recirculation, tilapia