ABSTRAK

Permasalahan yang terjadi pada budidaya ikan Lele Dumbo (*Clarias Gariepinus*) secara intensif adalah pemberian pakan buatan secara intensif keadaan tersebut berakibat meningkatnya limbah hasil ekskresi akibat pengaruh padat penebaran yang tinggi. Salah satu cara untuk mengatasinya yaitu sistem bioflok dan resirkulasi. Sistem bioflok dapat menekan biaya pakan selama pemeliharaan .Teknologi bioflok biasa digunakan untuk mengontrol kualitas air dan sebagai sumber pakan tambahan. Tujuan dari penelitian ini untuk mengetahui pengaruh system bioflok dengan resirkulasi, airasi dan gabungan resirkulasi dan airasi terhadap nilai IVS,HIS serta Faktor Kondisi pada Ikan Lele Dumbo mengunakan Metode penelitian eksperimental Rancangan Acak Lengkap (RAL) yang terdiri dari 4 perlakuan dan 4 kali ulangan dengan kepadatan masing masing perlakuan 500 ekor. Keempat perlakuan adalah sebagai berikut: P1 = sistem bioflok tanpa airasi dan sirkulasi. (kontrol), P2 = sistem bioflok dengan airasi, P3 = sistem bioflok dengan resirkulasi, P4 = sistem bioflok dengan airasi dan resirkulasi. Hasil penelitian dapat diambil kesimpulan bahwa berdasarkan Berdasarkan hasil penelitian sistem bioflok dengan sistem resirkulasi ,airasi dan gabungan sirkulasi dan airasi pada pemeliharaan ikan lele dumbo berpengaruh terhadap indeks viseral somatik (IVS) .Hasil dari penelitian ini semua perlakuan berpengaruh pada nilai IVS,HIS namun tidak berpengaruh pada faktor kondisi dengan perlakuan terbaik P3.

Kata kunci: Lele Dumbo ***(Clarias gariepinus)***, Bioflok, Aerasi, Resirkulasi, IVS (Indek Viceral Somatik),IHS (Indeks Hepato Somatik) dan Faktor Kondisi.

ABSTRAC

The problem that occurs in intensive African Catfish (Clarias Gariepinus) cultivation is intensive artificial feeding which is not supported by cheap feed prices, resulting in increased excretion of waste due to the effect of high stocking density. One way to overcome this problem is the biofloc and recirculation systems. Biofloc systems can reduce feed costs during maintenance. Biofloc technology is commonly used to control water quality and as a source of additional feed. The purpose of this study was to determine the effect of the biofloc system with recirculation, airation and a combination of recirculation and airation on the value of IVS, HIS and condition factors in African catfish (Clarias gariepinus) using experimental research method completely randomized design (CRD) consisting of 4 treatments. and 4 replications with a density of 500 each treatment. The four treatments were as follows: P1 = biofloc system without airation and circulation. (control), P2 = biofloc system with airation, P3 = biofloc system with recirculation, P4 = biofloc system with water and recirculation. Based on the results of the research conducted, it can be concluded that based on the results of research, the biofloc system with the recirculation system, water and combined circulation and airation in African catfish farming has an effect on the somatic visceral index (IVS). The average result is P1 = 0.0238 ± 0 , 0028, P2 = 0.023 ± 0.0017, P3 = 0.032 ± 0.0022, and P4 = 0.0197 ± 0.0013 then the hepato somatic index (IHS) value in African catfish The average result is P1 = 0.008 ± 0.0005, P2 = 0.0078 ± 0.0005, P3 = 0.011 ± 0.0006, and P4 = 0.0082 ± 0.0014. However, it does not affect the condition factor. The treatment of the biofloc system with recirculation was the best for the somatic visceral index (IVS) and the hepato somatic index (IHS), which were the same in the P3 treatment, respectively with the results of 0.032 ± 0.0022 and 0.011 ± 0.0006.

Keywords: Dumbo Catfish ***(Clarias gariepinus),*** Biofloc, Aeration, Recirculation, IVS (***Indeks Visceral somatic***), IHS ***(Ideks hepato somatic***) and Factor codition.