ABSTRAK

Penelitan ini berjudul Differensial leukosit, kadar glukosa, dan jumlah eritrosit darah ikan lele dumbo (*Clarias gariepinus*) yang dipelihara pada sistem bioflok. Ikan lele dumbo merupakan komoditas air tawar yang memiliki tingkat permintaan pasar yang tinggi sehingga perlu penerapan budidaya intensif menerapkan tingkat kepadatan yang tinggi dengan pemberian pakan berkadar protein tinggi, perlu pengontrolan kualitas air yang baik diantaranya menggunakan sistem budidaya bioflok. Penelitian ini bertujuan untuk mengetahui differensial leukosit, kadar glukosa, dan jumlah eritrosit pada ikan lele dumbo yang dipelihara menggunakan sistem bioflok yang berbeda. Penelitian ini menggunakan metode eksperimental dengan Rancangan Acak Lengkap (RAL) yang terdiri dari 4 perlakuan dan 4 ulangan. Perlakuan yang diberikan berupa pemeliharan lele dumbo menggunakan sistem bioflok tanpa aerasi dan resirkulasi, dengan penambahan aerasi, dengan penambahan resirkulasi, dan dengan penambahan aerasi dan resirkulasi. Berdasarkan hasil penelitian sistem bioflok dengan aerasi dan resirkulasi, berpengaruh terhadap total eritrosit, persentase monosit dan limfosit, akan tetapi tidak berpengaruh terhadap kadar glukosa darah dan persentase polymorfonuklear. Perlakuan sistem bioflok tanpa aerasi dan resirkulasi menghasilkan pengukuran kadar glukosa dan polymorphonuklear terbaik. Sistem bioflok dengan aerasi menghasilkan pengukuran jumlah eritrosit, presentase monosit, dan limfosit terbaik.

Kata Kunci: *Ikan lele dumbo (Clarias gariepinus); sistem bioflok; jumlah eritrosit; kadar glukosa; differensial leukosit*.

ABSTRACT

The title of this research is Differential Leukocytes, Glucose Levels, and The Number of Blood Erythrocytes of dumbo catfish (*Clarias gariepinus*) that are maintained in the biofloc system. Dumbo catfish is a freshwater commodity that has high level of market demand, so it is necessary to apply intensive cultivation to apply a high density level by feeding high protein levels, need to control water quality, including using the biofloc cultivation system. This study aims to determine the differential leukocytes, glucose levels, and the number of erythrocytes in dumbo catfish that are kept using different biofloc systems. This study used an experimental method with a Completely Randomized Design consisting of 4 treatments and 4 replications. The given treatments are in the form of raising catfish using biofloc system without aeration and recirculation, with the addition of aeration, with the addition of recirculation, and with the addition of aeration and recirculation. Based on the results of the biofloc system with aeration and recirculation, it affects to the total erythrocytes, the percentage of monocytes and lymphocytes, but it is not affect to the blood glucose levels and the percentage of polymorphonuclear. The treatments of the biofloc system without aeration and recirculation produce the best measurement of glucose levels and polymorphonuclear. Biofloc system with aeration produce the best measurement of the number of erythrocytes, the percentage of monocyte and lymphocytes.

Keywords: *Dumbo catfish (Clarias gariepinus); biofloc system; the number of erythrocytes; glucose level; differential leukocytes.*