

ABSTRAK

Padat tebar dapat mempengaruhi kesehatan ikan yang tergambar pada jumlah dan diferensial leukosit. Tujuan dari penelitian ini yaitu untuk mengetahui pengaruh perbedaan padat tebar pada ikan lele dumbo yang dibudidayakan pada sistem budikdamber terhadap jumlah leukosit dan diferensial leukosit. Penelitian ini dilakukan selama 40 hari dengan sistem budikdamber. Metode yang digunakan yaitu metode eksperimental dengan menggunakan Rancangan Acak Lengkap (RAL) yang terdiri dari 3 perlakuan dan 3 kali ulangan. Perlakuan pada penelitian ini yaitu padat tebar 30, 40, dan 50 ikan/70 liter air. Jumlah leukosit ditentukan berdasarkan jumlah eritrosit dan rasio leukosit eritrosit. Diferensial leukosit diamati secara mikroskopik pada preparat apus darah ikan. Penelitian ini menghasilkan bahwa padat tebar yang dilakukan tidak berpengaruh nyata terhadap jumlah dan diferensial leukosit. Jumlah total leukosit cenderung naik seiring dengan peningkatan padat tebar, sementara persentase limfosit cenderung menurun dan persentase monosit serta polimorfonuklear cenderung meningkat seiring bertambahnya padat tebar. Berdasarkan hal tersebut padat tebar yang diuji masih mendukung kesehatan ikan lele dumbo.

Kata kunci : *Leukosit, diferensial, limfosit, monosit, polimorfonuklear*



ABSTRACT

The density of the stocking can affect the health of the fish, as reflected in the number and differential of leukocytes. The purpose of this study is to determine the effect of different stocking densities on the number and differential of leukocytes in tilapia lutescens that are farmed using the budikdamber system. The study was conducted over 40 days using the budikdamber system. The experimental method used was a Randomized Complete Block Design (RCBD) consisting of three treatments and three replications. The treatments in this study were stocking densities of 30, 40, and 50 fish per 70 liters of water. The leukocyte count is determined based on the erythrocyte count and the erythrocyte-to-leukocyte ratio. The leukocyte differential was observed microscopically on blood smear preparations of the fish. The study found that stocking density did not significantly affect the number and differential of leukocytes. The total leukocyte count tends to increase with increased stocking density, while the percentage of lymphocytes tends to decrease and the percentage of monocytes and polymorphonuclear cells tends to increase with increased stocking density. Based on these findings, the stocking density tested still supports the health of lele dumbo fish.

Keywords: Leukocytes, differentiation, lymphocytes, monocytes, polymorphonuclear

