ABSTRAK

Pemberian larutan herbal terfermentasi melalui pakan diharapkan mampu mengurangi infeksi jamur dan meningkatkan respon imun ikan. Tujuan penelitian yaitu mengetahui pengaruh pemberian larutan herbal pada pakan terhadap prevalensi jamur, diferensiasi leukosit, dan kelangsungan hidup ikan nila selama uji tantang jamur patogen. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) dengan 4 perlakuan larutan herbal (P0: 0 mL/kg pakan; P1: 50 mL/kg pakan; P2: 75 mL/kg pakan; dan P3: 100 mL/kg pakan) dengan 3 kali ulangan. Sejumlah 360 ekor ikan diperlakukan selama 40 hari dan kemudian ditantang dengan jamur patogen selama 10 hari. Prevalensi fungi dan kelangsungan hidup diamati pada hari ke-10 setelah uji tantang, diferensiasi leukosit diamati sebelum dan setelah uji tantang. Pemberian larutan herbal terfermentasi secara nyata mengurangi persentase polimorfonuklear. Perlakuan cenderung menurunkan prevalensi jamur, meningkatkan kelangsungan hidup dan persentase limfosit. Kualitas air uji tantang yaitu suhu 28,2-29^{o}C dan pH 5,7-7,1.

Kata kunci : *larutan herbal; ikan nila; prevalensi jamur; differensiasi leukosit; jamur patogen*

ABSRACT

Suplementation of fermented herbal solution in feed is expected to reduce fungal infection and increase fish immune response. The purpose of the study was to determine the effect of herbal solution in feed on fungal prevalence, leukocyte differentiation, and survival rate of tilapia (*Oreochromis niloticus*) during the pathogenic fungal challenge test. This work implemented a completely randomized design (CRD) with 4 treatments of herbal solution (P0: 0 mL/kg feed; P1: 50 mL/kg feed; P2: 75 mL/kg feed; and P3: 100 mL/kg feed) and 3 replicates. A number of 360 fish was treated for 40 days and subsequently challenged with pathogenic fungi for 10 days. Fungal prevalence and survival rate were observed on day 10 after the challenge test, leukocyte differentiation was observed before and after the challenge test. Administration of fermented herbal solution significantly reduced the percentage of polymorphonuclear. Treatments tended to decrease fungal prevalence, increase survival rate and lymphocyte percentage. Challenge test water quality was 28.2-29^{o}C and pH 5.7-7.1.

Key words : *Herbal Solution; Nile Tilapia; Fungal Prevalence; Leukocyte Differentiation; Pathogenic Fungal*