INTISARI

PENGARUH FREKUENSI PEMBERIAN IMMUNOSTIMULAN TERHADAP PENINGKATAN SISTEM IMUN NON SPESIFIK SELULER IKAN LELE (*Clarias* sp.)

Penelitian ini bertujuan untuk mengetahui pengaruh frekuensi pemberian immunostimulan secara oral terhadap parameter pertahanan non spesifik seluler lele (*Clarias* sp.). Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) dengan 5 perlakukan dan 3 ulangan. Kontrol negatif (tanpa penambahan alginat, multivitamin dan asam amino) (P0), pakan dengan alginat, multivitamin dan asam amino setiap hari (P1), pakan dengan alginat, multivitamin dan asam amino setiap 3 hari (P2), pakan dengan alginat, multivitamin dan asam amino setiap 5 hari (P3), pakan dengan alginat, multivitamin dan asam amino setiap 6 hari (P4). Ikan dipelihara selama 8 hari dan pengujian dilakukan pada hari ke 8. Pemberian pakan di lakukan dua kali sehari sebanyak 3% dari biomassa. Parameter yang diamati meliputi aktivitas fagositosis, indeks fagositosis, superoxyde dismutase (SOD), diferiensiasi leukosit, hematokrit, dan leukokrit. Hasil penelitian menunjukkan pemberian alginat, multivitamin dan asam amino secara oral pada ikan lele dapat meningkatkan fagositosis pada ikan lele, tetapi tidak berpengaruh terhadap superoxide dismutase, ledakan respirasi, dan diferensiasi leukosit. Pemberian alginat, multivitamin dan asam amino dengan frekuensi 3 hari sekali memberikan hasil terbaik.

Kata kunci : alginat, multivitamin, asam amino, imunostimulan, ikan lele.

ABSTRACT

EFFECT OF IMMUNOSTIMULANT FEEDING FREQUENCY ON NON SPECIFIC CELLULAR IMMUNITY SYSTEM IN CATFISH (Clarias sp.)

The purpose of this study was to determine the effect of feeding frequency of immunostimulant on the non-specific cellular immune parameters of catfish (*Clarias* sp.) This study used a completely randomized design (CRD) with 5 treatments and 3 replications. Negative control (without the addition of alginate, multivitamins, and amino acids) (P0), feed with alginate, multivitamins, and amino acids every day (P1), feed with alginate, multivitamins, and amino acids every 3 days (P2), feed with alginate, multivitamins, and amino acids every 5 days (P3), feed with alginate, multivitamins, and amino acids every 6 days day (P4). Fish are reared for 8 days and the tests were perfomed on day 8. Feeding is done twice a day as much as 3% of the biomass. The parameters observed included phagocytic activity, phagocytosis index, superoxyde dismutase (SOD), leukocyte differentiation, hematocrit, and leucocyte. The results showed that oral administration of alginate, multivitamins, and amino acids in catfish increased phagocytic activity, but did not affect on superoxyde dismutase, respiration brust, and leukocyte differentiation. The most effective feeding frequency of alginate, multivitamins, and amino acids was once three days.

Keywords: alginate, multivitamin, amino acid, immunostimulant, catfish.