INTISARI

HISTOPATOLOGI HATI DAN GINJAL IKAN LELE (*Clarias batrachus*) AKIBAT PEMBERIAN PROBIOTIK

Begum Fatima Ratu Aditya

11/311855/KH/6976

Probiotik ialah produk yang tersusun oleh biakan mikroba atau pakan alami mikroskopik yang bersifat menguntungkan dan memberikan dampak bagi peningkatan keseimbangan mikroba saluran usus hewan inang. Probiotik mengandung bakteri Gram positif dan Gram negatif, yeast dan jamur mampu menyeimbangkan mikroba pencernaan sehingga dapat meningkatkan daya cerna ikan. Penelitian ini dilakukan untuk mengetahui histopatologi hati dan ginjal ikan lele yang mati sesudah diberi probiotik *Lactobacillus* sp. dan *Bacillus* sp.

Penelitian menggunakan 27 ekor ikan lele (*Clarias batrachus*) yang dipelihara masing-masing 9 ekor ikan. Akuarium grup D1 diberi probiotik 10^6 sel/ml, D2 probiotik $0{,}5.10^6$ sel/ml dan K sebagai kontrol tanpa perlakuan. Dipping selama 4 jam kemudian ikan lele dipindahkan ke akuarium air segar dan diulangi pada hari berikutnya selama satu bulan. Ikan yang mati dinekropsi diambil sampel hati dan ginjal menggunakan pewarnaan Hemotoxylin Eosin. Terakhir preparat diamati dengan mikroskop.

Hati yang diberi probiotik menunjukkan perubahan histopatologi nekrosis, makrofag, radang limfosit, degenerasi vakuoler dan kongesti. Sedangkan ginjal yang diberi probiotik menunjukkan perubahan histopatologi nekrosis tubulus dan peningkatan jumlah makrofag.

Kata Kunci: *Probiotik, histopatologi, Clarias batrachus*

ABSTRACT

HISTOPATHOLOGY KIDNEY AND LIVER CATFISH (*Clarias batrachus*) DUE TO GIVING PROBIOTICS (*Lactobacillus* sp. *Bacillus* sp.)

Begum Fatima Ratu Aditya

11/311855/KH/6976

Probiotics are products that are composed of cultured microbes or microscopic natural food that are beneficial and give effect to increase the microbial balance of the intestinal tract of the host animal. Probiotics contain bacteria Gram positive and Gram negative, yeast and fungi are able to balance the microbial digestion so as to improve the digestibility of fish. This study was conducted to determine liver and kidney histopathology catfish that died after given probiotic *Lactobacillus* sp. and *Bacillus* sp.

The study used 27 animals catfish (*Clarias batrachus*) are maintained respectively 9 fish. Aquarium D1 group were given the probiotic 10^6 cells / ml, D2 probiotics 0,5x10 cells / ml and K as controls without treatment. Then, after 4 hours of catfish were transferred to fresh water aquarium and repeated at the next day for a month. Then the dead fish samples taken dinekropsi liver and kidneys using Hemotoxylin eosin staining. Final preparations were observed with a microscope.

Hearts were given probiotics showed histopathological changes necrosis, macrophages, lymphocytes inflammation, degeneration vakuoler and congestion. While the kidneys are given probiotics showed histopathological changes tubular necrosis and an increased number of macrophages.

Keyword : *Probiotics, histopathology, Clarias batrachus*