

## ABSTRAK

Pakan yang baik akan mempercepat pertumbuhan dan kelangsungan hidup ikan. Salah satu cara meningkatkan nutrisi dalam bahan pakan adalah dengan fermentasi. Fermentasi adalah proses pemecahan senyawa organik menjadi senyawa sederhana dengan menggunakan bantuan mikroorganisme. Fermentasi dapat menggunakan jamur *Rhizopus* sp. *Rhizopus oligosporus* adalah jamur dominan dalam ragi tempe. Tujuan penelitian adalah mengetahui pemanfaatan hasil fermentasi manure ayam untuk pertumbuhan, FCR dan kelangsungan hidup ikan lele. Penelitian ini menggunakan metode eksperimental dengan 3 perlakuan dan 3 ulangan yaitu pemberian pakan pelet komersial 100% (P1), pelet komersial 75% dan fermentasi manure 25% (P2), dan pelet komersial 50% dan fermentasi manure 50% (P3). Penelitian dilaksanakan selama 45 hari. Analisis data dilakukan secara deskriptif. Hasil proksimat manure ayam pedaging sebelum dan sesudah fermentasi didapatkan protein 21,9 dan 19,23 serta serat kasar 10,09 dan 9,40. Laju pertumbuhan mutlak berkisar 0,56 gr-5,11 gr, laju pertumbuhan spesifik berkisar 0,002 gr/hari-0,014 gr/hari, rasio konversi pakan berkisar 4,79-0,92, tingkat kelangsungan hidup berkisar 18%-51%. Berdasarkan hasil penelitian hasil fermentasi manure ayam tidak memberikan hasil yang baik. Hal ini disebabkan adanya white spot, dan *gyrodactylus*. Kualitas air masih dalam kisaran normal yaitu suhu berkisar 25-29 °C, pH berkisar 7 dan kandungan oksigen berkisar 3,7-3,73 mg/L.

*Kata kunci:* *Clarias gariepinus*, *Lele*, *Manure ayam pedaging*, *Rhizopus oligosporus*

## ABSTRACT

Good feed will accelerate the growth and survival of fish. One way to increase nutrition in feed ingredients is by fermentation. Fermentation is a process of breaking down organic compounds into simple compounds using microorganisms. Fermentation can use *Rhizopus* sp. mushrooms. *Rhizopus oligosporus* is the dominant fungus in tempe yeast. The objective of the research was to determine the utilization of fermented chicken manure for growth, FCR and survival of catfish. This study used an experimental method with 3 treatments and 3 replications, namely feeding 100% commercial pellets (P1), 75% commercial pellets and 25% manure fermentation (P2), and 50% commercial pellets and 50% manure fermentation (P3). This study used an experimental method with 3 treatments and 3 replications, namely feeding 100% commercial pellets (P1), 75% commercial pellets and 25% manure fermentation (P2), and 50% commercial pellets and 50% manure fermentation (P3). The research was conducted for 45 days. Data analysis was carried out descriptively. Proximate results of broiler manure before and after fermentation showed protein 21.9 and 19.23 and crude fiber 10.09 and 9.40. Absolute growth rate ranged from 0,56 gr-5,11 gr, specific growth rate ranged from 0,002 gr/day-0,014 gr/day, feed conversion ratio ranged from 4,79-0,92, survival rate ranged from 18%-51%. Based on the research results, the results of fermented chicken manure did not give good results. This is due to the presence white spot, and *gyrodactylus*. Water quality is still within the normal range, namely the temperature ranges from 25-29 °C, the pH ranges from 7 and the oxygen content ranges from 3.7-3.73 mg/L.

*Keywords:* Broiler Manure, Catfish, *Clarias gariepinus*, *Rhizopus oligosporus*