

ABSTRACT

THE EFFECT OF ADDITIONAL KETAPANG (*Terminalia catappa* L.) LEAVES TO FEED COMPOSITION TO PREVENT *Aeromonas hydrophila* BACTERIA ON THE GROWTH OF DUMBO CATFISH (*Clarias gariepinus*) FRY

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The African catfish (*Clarias gariepinus*) is a popular fish. However, its cultivation still faces significant challenges due to high feed costs, accounting for 60-70%. Therefore, efforts are being made to use alternative feeds, including the addition of ketapang leaves. This study aimed to determine the effect of adding ketapang leaves to feed composition on inhibiting *A. hydrophila* bacterial infection, evaluate the proximate analysis of water, ash, protein, fat, fiber, and carbohydrate content in the feed, and identify *A. hydrophila* bacteria in African catfish. The research was conducted from February to December 2024 at Sribhawono, Lampung State Polytechnic, Lampung University, and Lampung Verternair Center. A completely randomized design (CRD) with three treatments and six replications was used to assess the growth and development of African catfish. Proximate testing methods included quantitative chemical analysis and identification of *A. hydrophila* bacteria. Data were analyzed using the Ansira test. The results showed that the addition of ketapang leaves to fish feed did not significantly affect catfish growth and development, but inhibited the growth of the pathogenic *A. hydrophila* bacteria. This was evident from all treatments, with only two fish infected with *A. hydrophila* bacteria. The infected fish were found in the alternative feeds P1.U2 and P2.U3. The conclusion is that the addition of ketapang leaves did not significantly affect catfish growth but inhibited *A. hydrophila* infection. The ash and fiber content of P1 and P2 exceeded the minimum requirements, and *A. hydrophila* bacteria were present in the alternative feed treatments P1.U2 and P2.U3.

Keywords: African catfish (*Clarias gariepinus*), alternative feed, identification of *Aeromonas hydrophila* bacteria, proximate test.

ABSTRAK

PENGARUH PENAMBAHAN DAUN KETAPANG (*Terminalia catappa* L.) PADA KOMPOSISI PAKAN UNTUK MENCEGAH BAKTERI *Aeromonas* *hydrophila* PADA PERTUMBUHAN BENIH LELE DUMBO (*Clarias* *gariepinus*)

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Lele dumbo (*Clarias gariepinus*) adalah ikan yang digemari masyarakat. Namun budidaya masih banyak mengalami kendala mahal nya pakan, 60-70% karena itu selama proses diupayakan untuk menggunakan pakan alternatif yaitu menambahkan daun ketapang. Penelitian bertujuan mengetahui pengaruh penambahan daun ketapang pada komposisi pakan untuk menghambat infeksi bakteri *A. hydrophila*, mengevaluasi kandungan analisis proksimat air, abu, protein, lemak, serat, dan karbohidrat pada pakan, mengidentifikasi bakteri *A. hydrophila* pada lele dumbo. Penelitian dilaksanakan Februari-Desember 2024 di Sribhawono, Politeknik Negeri Lampung, Universitas Lampung dan Balai Verternair Lampung. Metode Rancangan Acak Lengkap (RAL) 3 perlakuan dan 6 pengulangan melihat pertumbuhan dan perkembangan lele dumbo. Metode uji proksimat analisis kimia kuantitatif dan metode identifikasi bakteri *A. hydrophila*. Analisis data dengan uji data Ansira. Hasilnya pertumbuhan, perkembangan, pemberian daun ketapang dalam pakan ikan tidak memberi pengaruh yang signifikan terhadap pertumbuhan ikan lele, namun dapat menghambat pertumbuhan bakteri patogen *A. hydrophila*. Hal ini dapat dilihat dari semua total perlakuan hanya ditemukan 2 ikan yang terinfeksi bakteri *A. hydrophila*. Ikan yang terinfeksi bakteri *A. hydrophila* terdapat pada pakan alternatif P1.U2 dan P2.U3. Kesimpulan penambahan daun ketapang tidak memberi pengaruh yang signifikan pada pertumbuhan lele, namun dapat menghambat infeksi bakteri *A. hydrophila*, kandungan abu dan serat P1 dan P2 melebihi syarat minimum, terdapat bakteri *A. hydrophila* menginfeksi ikan pada perlakuan pakan alternatif P1.U2 dan P2.U3.

Kata kunci : lele dumbo (*Clarias gariepinus*), pakan alternatif, identifikasi bakteri *Aeromonas hydrophila*, uji proksimat.