

ABSTRAK

Aeromonas hydrophila merupakan bakteri patogenik oportunistik yang umum ditemukan di saluran pencernaan ikan. Suplementasi garam pada pakan ikan dapat mempengaruhi bakteri yang ada pada saluran pencernaan ikan. Tujuan dari penelitian ini yaitu mengetahui pengaruh penambahan garam pada pakan terhadap persentase dan jumlah *Aeromonas hydrophila* pada saluran pencernaan Nilem. Sampel yang digunakan adalah Nilem yang telah dipelihara dengan pemberian perlakuan penambahan garam pada pakan (P1: 0%, P2: 1%, P3: 2%, P4: 3%, P5: 4%) selama 60 hari. Jumlah bakteri total di saluran pencernaan ikan dihitung menggunakan metode TPC pada media TSA. Karakteristik morfologi dan gram KOH sampel bakteri kemudian diamati. Sampel isolat bakteri Gram negatif ditumbuhkan pada media GSP. Koloni berwarna kuning dicatat sebagai *Aeromonas hydrophila* dan digunakan untuk menghitung persentase bakteri ini. Jumlah *Aeromonas hydrophila* dihitung berdasarkan proporsi dan hasil TPC. Hasil penelitian menunjukkan bahwa perlakuan suplementasi garam pada pakan terhadap proporsi dan jumlah *Aeromonas hydrophila* pada saluran pencernaan Nilem, tidak berpengaruh nyata ($P > 0,05$). Proporsi *Aeromonas hydrophila* tertinggi terdapat pada perlakuan suplementasi garam 1% dengan nilai 18% dan hasil dari perlakuan lainnya menunjukkan proporsi yang cenderung meningkat dibandingkan dengan perlakuan kontrol dan jumlah *Aeromonas hydrophila* tertinggi terdapat pada perlakuan suplementasi garam 1% dengan nilai $8,13 \times 10^6$ CFU/g dan jumlah *Aeromonas hydrophila* pada perlakuan lainnya menunjukkan jumlah yang cenderung meningkat dibandingkan dengan perlakuan kontrol. Penelitian ini mengindikasikan garam cenderung menyebabkan peningkatan proporsi serta jumlah *Aeromonas hydrophila* pada saluran pencernaan Nilem (*Osteochilus vittatus*).

Kata kunci: *Aeromonas hydrophila*, *Osteochilus vittatus*, suplementasi garam, saluran pencernaan

ABSTRACT

Aeromonas hydrophila is an opportunistic pathogenic bacteria commonly found in the gastrointestinal tract of fish. Salt supplementation in fish feed can affect the presence of bacteria in the gastrointestinal tract of fish. The purpose of this study was to determine the effect of salt addition in feed on the occurrence and number of *Aeromonas hydrophila* in the gastrointestinal tract of Bonylip Barb (*Osteochilus vittatus*). The samples used were Bonylip Barb that had been treated with salt supplementation in feed (P1: 0%, P2: 1%, P3: 2%, P4: 3%, P5: 4%) for 60 days. The total number of bacteria in the fish gastrointestinal tract was counted using the TPC method on TSA media. Morphological characteristics and gram KOH of bacterial samples were then observed. Gram negative bacterial isolate samples were grown on GSP media. Yellow colored colonies were recorded as *Aeromonas hydrophila* and used to calculate the occurrence of these bacteria. The number of *Aeromonas hydrophila* was calculated based on the proportion and TPC results. The results showed that the treatment of salt supplementation in feed on the proportion and number of *Aeromonas hydrophila* in the digestive tract of Bonylip Barb, had no significant effect ($P > 0.05$). The highest proportion of *Aeromonas hydrophila* was in the 1% salt supplementation treatment with a value of 18% and the results of other treatments showed a proportion that tended to increase compared to the control treatment and the highest number of *Aeromonas hydrophila* bacteria was in the 1% salt supplementation treatment with a value of 8.13×10^6 CFU/g and the number of *Aeromonas hydrophila* in other treatments showed a number that tended to increase compared to the control treatment. This study indicates that salt tends to cause an increase in the occurrence and number of *Aeromonas hydrophila* in the digestive tract of Bonylip Barb (*Osteochilus vittatus*).
Keywords : *Aeromonas hydrophila*, *Osteochilus vittatus*, salt supplementation, gastrointestinal tract