

ABSTRAK

Keberadaan bakteri proteolitik dalam filter media pemeliharaan dapat dipengaruhi oleh sisa hasil eksresi ikan serta limbah pakan yang tidak termanfaatkan. Tujuan dari penelitian ini adalah untuk mengetahui pengaruh suplementasi garam dan ramuan herbal terhadap kelimpahan dan indeks aktivitas bakteri proteolitik pada filter media pemeliharaan nilem (*Osteochillus vittatus*). Penelitian ini menggunakan metode eksperimental dengan 4 perlakuan dan 4 ulangan. Perlakuan terdiri atas kontrol, suplementasi garam krosok 3%, ramuan herbal sebanyak 10 mL/kg pakan, penambahan garam sebanyak 3% dan ramuan herbal sebanyak 10 mL/kg pakan. Parameter penelitian yaitu kelimpahan bakteri proteolitik, proporsi bakteri gram negatif dan positif, proporsi bakteri proteolitik serta indeks aktivitas bakteri proteolitik. Hasil penelitian menunjukkan kelimpahan bakteri proteolitik pada perlakuan ramuan herbal lebih tinggi dibanding kontrol namun, tidak berbeda nyata ($P>0,05$). Proporsi bakteri proteolitik menunjukkan hasil perlakuan cenderung lebih rendah dibanding kontrol. Hasil indeks aktivitas proteolitik menunjukkan hasil berbeda nyata dimana perlakuan lebih tinggi dibanding kontrol.

Kata kunci : *Nilem; Garam; Ramuan Herbal; Filter Pemeliharaan; Proteolitik.*

ABSTRACT

The presence of proteolytic bacteria in the filter media of fish cultivation can be influenced by the residual excretion of fish and unused feed waste. The purpose of this study was to determine the effect of salt and herbal supplementation on the abundance and activity index of proteolytic bacteria in filter media of cultivation of Bonylip barp (*Osteochillus vittatus*). This study used an experimental method with four treatments and four replicates. The treatments were control, 3% salt supplementation, 10 mL/kg feed herbal supplementation, and a combination of 3% salt and 10 mL/kg feed herbal supplementation. The parameters studied were the abundance of proteolytic bacteria, the proportion of gram-negative and gram-positive bacteria, the proportion of proteolytic bacteria, and the proteolytic activity index. The results showed that the abundance of proteolytic bacteria in the herbal supplement treatment was higher than the control but it was not significantly different ($P > 0.05$). The proportion of proteolytic bacteria showed results that were slightly lower than the control. The proteolytic activity index showed significant effects, where those of the treatment was higher than those of the control.

Keywords: *Bonylip barp*; *Salt*; *Herbal*; *Filter Cultivation*; *Proteolytic*