ABSTRACT

DAMAYANTI. Giving sinbiotic with different doses in white shrimp feed for prevention of infection IMNV (Infectious Myonecrosis Virus). Supervised by Widanarni and Sukenda.

Sinbiotic is an alternative on controlling the IMNV (Infectious Myonecrosis Virus) infection in white shrimp. The effect of sinbiotic feeding with different doses on the survival and immune response white shrimp that infected with IMNV has been studied. SKT-b *Vibrio alginolyticus* and oligosaccharides extracted from sweet potato (sukuh variety) was used as probiotic and prebiotic. Twenty white shrimps with average weight of 0.54 ± 0.04 g, was maintained for 30 days in aquarium with 40 liter of volume. There were five treatments applied to the shrimps, consisted of K- and K- (without the addition of sinbiotic), A (the addition of sinbiotic half dose: 0.5% probiotic and prebiotic of 1%, B (the addition of sinbiotic dose: probiotic1% and prebiotic 2%, and C (the addition of sinbiotic double dose: probiotic 2 % and prebiotic 4%). After 30 days given with treatment feed, the experimental shrimp was infected by oral with IMNV, except K-. The result showed that giving sinbiotic feed with the different doses can increased survival and immune response. Treatment C with dose of probiotic 2% and prebiotic 4% giving the best result for prevention of infection IMNV, had the best survival (80%) and immune response.

Keywords: white shrimp, IMNV, sinbiotic, survival rate, immune response