ABSTRACT

DWI FEBRIANTI. Effectiveness of intestinal shrimp probiotics in inhibiting growth of *Vibrio harveyi* in shrimp larvae *Litopenaeus vannamei*. Supervised by MUNTI YUHANA and WIDANARNI.

Vibriosis is one of infectious disease that often attacks the shrimp vaname culture. It caused by *Vibrio harveyi*. One of alternative in controlling the luminous disease is the application of probiotic bacteria which is considered as enviromental friendly treatment. This research was carried out to evaluate the effectiveness of four strains probiotic in inhibiting growth of *Vibrio harveyi* in shrimp larva *Litopenaeus vannamei*. The study design used was the complete random design with six treatments: the addition of isolates F5, F17, F19, F43, positive control (the addition of *V. harveyi* MR 5339 Rf R), and the negative control (without addition of probiotics and *V. harveyi* MR 5339 Rf R). Based on the observations, the survival rate of shrimp post larvae treatment with four candidate probiotics have a significant difference survival rate (P <0,05) when compared with positive control (67,5±6,45 %). The survival rate of post larvae treatment with candidate probiotics were ranging from 78,75±8,54 - 92,50±6,45 %. Daily growth rate of length and weight have no significant differences in all treatments.

Keywords: *Vibrio harveyi*, probiotic, shrimp vaname