ABSTRACT

SUNARTO. Screening of Probiotic Bacteria from Intestine and Culture Environment of Hoeven’s slender carp Leptobarbus hoeveni Blkr to Control Pathogenic Bacteria. Under supervision of SUKENDA and WIDANARNI.

The ability of probiotic bacteria to control disease infection has been used in aquaculture. This experiment was conducted to isolate and characterise probiotic bacteria; to test the competition ability probiotic bacteria against pathogenic bacteria; and to improve survival rate of Leptobarbus hoeveni. The bacteria were isolated from Leptobarbus hoeveni and its culture environment, and then tested to know its ability to inhibit bacterial fish pathogen in vitro. Furthermore, the selected probiotic bacteria were tested in vivo to evaluate their ability to inhibit pathogen in the body of Leptobarbus hoeveni. Research results probiotic bacteria which is isolated from intestine and culture environment of Leptobarbus hoeveni showed inhibit the growth of Streptococcus iniae, Flexibacter columnaris, Arcobacterium fortuitum and Aeromonas hydrophila in vitro. Isolate DD3 serve the purpose of candidate probiotik because of the ability to inhibit A. hydrophila, the most tolerant bacteria in Leptobarbus hoeveni.

Keywords: probiotic bacteria, Leptobarbus hoeveni and pathogenic bacteria