

Election and Characteristics of Probiotic Bacteria Indonesia Original of Tiger Prawn (*Penaeus monodon*) Based on Sequens 16S rDNA Technique

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ABSTRACT

This research was conducted from January to July 2011 and aims to selected the species of probiotic bacteria and molecular characteristics along with to observe phylogenetic from bacteria identified based on sequens 16S rDNA technique. The bacteria were isolated from intestine of the Tiger prawn (Penaeus monodon) to got from fishfond at BBPBAP Jepara. Isolate of bacteria and PCR (Polymerase Chain Reaction) aplicated in the integrated Fish Health and Enviromental Laboratory at BBPBAP Jepara. The purified and sequenced of DNA were done in Charoen Pokphand Indonesia, Jakarta. The analized result of 16S rDNA shown that 3 bacterial species may be potential as probiotic. There were A Isolate was Bacillus bataviensis strain FNS09, B Isolate was Bacillus bataviensis strain FNS09. Two this isolate out of analized BLAST had homology 97% with Bacillus bataviensis strain CCGE2059 bacteria according to analyses phylogenetic the three bacteria to shown genetic relationship. C Isolate was very likely a new species Caulobacter sp with strain FNS09 and according to phylogenetic to own ancestors with Chromobacterium violaceum bacteria. These bacteria grow well at pH 2 and this indicates one of probiotic bacteria characteristic.

Keywords: Probiotic, tiger prawn, molecular characteristic, isolate, 16S rDNA

