

Inventory of ectoparasites and molecular identification of pathogenic bacteria on bonylip barb (*Osteochilus vittatus*) cultivated in Banyumas District

Title	Inventory of ectoparasites and molecular identification of pathogenic bacteria on bonylip barb (<i>Osteochilus vittatus</i>) cultivated in Banyumas District
Author Order	2 of 6
Accreditation	3
Abstract	<p>The aims were to do an ectoparasite and pathogenic bacteria inventory of Bonylip barb reared in Banyumas district. Total of 118 fish were randomly taken from Singasari (30 individual), Pabuaran (30 individual), Beji (30 individual) and Jipang (28 individual) villages. This work observed ectoparasite species, prevalence, and intensity as well as pathogenic bacteria species. Ectoparasites were identified based on morphological characteristics observed microscopically and their prevalence and intensity were calculated. Bacterial pathogen was isolated from fish samples showing symptoms of bacterial disease and identified molecularly based on 16s rDNA sequence using BLAST dan phylogenetic analysis. Results showed <i>Trichodina</i> sp. and <i>Monogeneans</i> were found infected fish samples from all location with prevalence was 70-100%. <i>Ichthyophthirius multifiliis</i> was found from all location except Singasari village. Some of fish samples showed fin necrosis and five bacterial isolates were obtained. 16s rDNA marked gene was successfully amplified and sequenced. Based on sequence analysis, five isolates could be clustered into two groups, the first was found only in Singasari village and the second was found in Singasari and Beji villages. Similarity value of 16s rDNA gene sequence these two groups was 99,8%. Result of BLAST and phylogenetic analysis showed that the bacterial pathogens were identified as group of <i>Aeromonas hydrophila</i> complex.</p>
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