COMMON DISEASES OF Pangasius hypophtalmus FARmed IN TEMERLOH, PAHANG, MALAYSIA


*Kulliyyah of Science, International Islamic University Malaysia, 25200 Kuantan, Pahang, Malaysia.
*National Fish Health Research Institute, Jalan Batu Maung, 11960 Batu Maung, Penang, Malaysia.
*Correspondence: nurnazifah@itum.edu.my

Aquaculture is the farming of fish especially freshwater fish is one of the fastest growing sectors of the global food production industry. However, high mortality due to bacterial and virus infection is the main problem that needs to be solved. Pangasius spp. is the most widely cultured freshwater fish in Pahang especially in Pekan and Temerloh, Pahang. The Fishery Department in Malaysia is encouraging the expansion of freshwater industry to alleviate income among the agriculturist and fishermen. Unfortunately, effect of the disease in Pangasius aquaculture had caused loses approximately RM 2.4 millions per year and this scenario may not reflect the rapid pace in Malaysia Fisheries Sector. Therefore, this research is conducted to determine the risk factors associated with the prevalence of bacterial and virus infections in Pangasius spp. in Temerloh, Pahang, Malaysia. The observation was carried out for four months which in February 2016 until May 2016 at two separate farms in Temerloh. Bacterial identification is conducted using biochemical test, 20 NE and 20 E system followed by confirmation of the bacteria by using Polymerase Chain Reaction (PCR). Meanwhile, molecular approaches using conventional PCR is used for virus identification. Physical and chemical water quality parameters observed are water temperature, pH and dissolved oxygen (DO), nitrite, sulfide, iron and ammonia. The results showed that fish sampled were highly infected by bacterial disease caused by Aeromonas hydrophila which constitute 52% from all bacteria found. The temperature of water is increasing from February to May which is from 28 °C to 32 °C meanwhile pH and DO value are constant. There is no virus detected throughout these four months observation. Temperature significantly affects the bacterial infection in Pangasius hypophtalmus farming in Temerloh, Pahang. In conclusion, most common disease in Pangasius hypophtalmus farming in Temerloh, Pahang is Motile Aeromonas Septicemia (MAS).

Keywords: Motile Aeromonas Septicemia (MAS), Pangasius hypophtalmus, Fish Diseases