

**PREVALENCE AND INTENSITY OF ECTOPARASITES ON  
AFRICAN CATFISH (*Clarias gariepinus*) IN FISH FARMS AT WEST  
COAST OF SABAH**

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## ABSTRACT

### PREVALENCE AND INTENSITY OF ECTOPARASITES ON AFRICAN CATFISH (*Clarias gariepinus*) IN FISH FARMS AT WEST COAST OF SABAH

The African catfish (*Clarias gariepinus*), is generally considered to be one of the most important tropical catfish species for aquaculture purposes and have high nutritive value. African catfish was well known as freshwater fish that resistant to disease, therefore bad feed quality, wrong feeding and farm management would caused it became susceptible to disease. A total of 30 samples of the African catfish (*Clarias gariepinus*) were collected at each fish farms located at Tuaran, Penampang and Inanam. The mucus of the sample was taken and examined under the microscope to identify the species of ectoparasites based on their morphology. The prevalence and intensity of the ectoparasites was calculated by using formula. The physico-chemical parameters (dissolved oxygen (ppm), temperature (°C), pH and salinity (PSU)) were taken by using multiparameter probe. Statistical analysis was used to study the correlation between the physico-chemical parameters and the prevalence and intensity of ectoparasites at all fish farms. Three types of ectoparasites were identified include *Amyloodinium sp.*, *Capillaria spp.* and *Nygolaimus sp.* Prevalence of ectoparasites on African catfish (*Clarias gariepinus*) for Tuaran fish farm was at (93.33%), followed by Penampang at (86.67%) and Inanam at (86.67%). The mean intensity of ectoparasites for the three fish farms were (1.61) in Tuaran, (2.35) in Penampang and (1.54) in Inanam. There are no statistically significantly difference in the prevalence and intensity on locations and both sex of African Catfish (*Clarias gariepinus*) in the three selected fish farms at west coast of Sabah. Overall, the abiotic and biotic factors influence the prevalence and intensity where some of the physico-chemical parameter shows statistically significant correlation with the prevalence and intensity of ectoparasites on African Catfish (*Clarias gariepinus*). Hence, fish farmers are recommended to continuously upgrading the water and fish management of the fish farms to ensure high quantity and quality for the fish to be sold as well as to be consumed by local communities.