

**COMPARATIVE GROWTH RATES AND GROSS
MORPHOLOGY OF HYBRID CATFISH,
Clarias gariepinus (♀) X *Clarias macrocephalus* (♂)**

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ABSTRACT

Catfishes are among the group that has been considered economically important fishes in the Philippines and in other countries. The freshwater catfish *Clarias macrocephalus* is native to the Philippines but it is becoming scarce in many natural habitats. It is a favorite food dish due to its tender and delicious meet. Aquaculturists these days focus more their attention to the culture of exotic species like *Clarias gariepinus* and *Clarias batrachus* that in turn resulted to the near extinction of the native species. There is therefore a need to undertake a breeding program involving this native catfish and other exotic species.

A 12-week study was conducted to compare the growth rates of the hybrid catfish *C. macrocephalus* (♂) X *C. gariepinus* (♀) in natural pond and laboratory rearing condition. In addition, the length-weight relationship was also determined. Gross morphology was also noted in the experiment.

Results showed that the trend for SGR of the hybrid in natural pond and laboratory rearing conditions from weeks 2 to 12 is decreasing. Continued feeding of the hybrids on artificial diets result in poor fish growth. T-test revealed that there is a significant difference on the SGR for both the length and weight with hybrids in natural pond rearing condition being consistently higher than the laboratory set-up.

From the linear regression equation, there was no homogeneity of regression coefficients or slopes in the mean body and lengths (MBL) and mean body weights (MBW) of the hybrids in the natural pond and laboratory rearing condition. It simply means that there is a significant difference on the growth rates of the hybrid as to the type of environment they are reared.

The product-moment correlation showed that there is a linear relationship between the length and the weight of the hybrid fish, 7.9305378×10^4 being the constant.

Gross morphology of the hybrids include the appearance of a trident-shaped occipital process, which was not pointed and narrow as in the case of the parent *C. gariepinus*. A turtle shell-like designs arranged bilaterally characterizes the dorsal side of the head. A modification of the dorsal fin was also noted as to the presence of the adipose fin at the posterior end of the dorsal fin, which was about 3-5 mm in length.