Bioaccumulation of Lead (Pb) and Corelation with Growth Rate of Oreochromis mossambicus

Name : Sumah Yulaipi  
NRP : 1508100032  
Department : Biology  
Advisor Lecture : Aunurohim, S. Si., DEA

ABSTRACT

This research was conducted in term to know the bioaccumulation of lead (Pb) and corelation with growth rate of Oreochromis mossambicus. This research includes the preliminary test to determine the concentration of PbCl₂. Fish test preparation, AAS (Atomic Absorbtion Spectrophotometry) test, observation growth of fish consisted of long and weight parameter. The determination of concentration PbCl₂ preliminary test result obtained the LC₅₀₉₆h's value is 313,232 mg/L. Variation concentration used is 0%; 2,5%; 5%; and 10% from LC₅₀₉₆h. Lead’s concentration and day’s presentation influence lead’s concentration on fish flesh with p value of ANOVA two – way is 0,000 and the concentration that influence is 10%LC₅₀₉₆h in 30th day. On the fish’s growth rate the bigger concentration used and the longer exposure to lead, the growth rate (specific growth rate and growth rate of the daily length) decreases. Moreover, based on p value of ANOVA one – way, the decrement of specific growth rate and daily long growth rate were not influenced by deposits of the metal weight lead (Pb) that is in the flesh of a fish, p value of ANOVA one – way on specific growth rate is 0,453 and p value on length daily rate is 0,223.

Key word : flesh, Oreochromis mossambicus, PbCl₂, growth rate