Effect of the Survival Rate of Postlarvae Crayfish, Cambarellus montezumae, in Its Aquaculture Production

Diaz Lorenzo, Agustin (School: Shun Tak Fraternal Association Yung Yau College)

Mota Rojo, Francisco (School: Specialized School of Science and Mathematics Genaro Cautino Vazquez)

The Crayfish Cambarellus montezumae is a crustacean used for human consumption due to the nutrional value (high protein content). However, one of its most relevant problems is the high mortality that occur during the firs weeks due to the weakness state presented during the molting cycle. Therefore, the objective of this study is to evaluate the impact of hiding places in the survival rate and the number of postlarvae available for its culture without overexploit natural areas. In the first phase were obtained and the second phase an unifactorial experimental design was applied. The independent variable was the type of hiding place with three levels (pvc tube, artificial plant and absence of cache) and the dependent variables were survival rates, moult frequency, length (growth rate). At the end of the experiment avarage number of eggs per ovigerous female was 38 ± 7 and a hatching rate of $92.4 \pm 5.3\%$. The mortality caused by cannibalism was higher in the experimental without hiding places with a percentage of 57% (P<0.05) due to the cycle mud and the variations in size among organisms within the same treatment. In conclusion, in the first weeks of C. Montezumae Postlarvae's life, the hidding places were necessary to avoid the mortality and to have enough organisms quantitties to be used in the fattening process of culture without overexploiting natural areas.