Abstract
Intensive fish production systems are characterized by 100% artificial feeding, so any dietary imbalances or deficiencies may lead to diseases outbreaks and economic losses. This study was set out to determine the effects of increasing levels of dietary vitamin E on growth and hematology of juvenile pacu. Fishes were fed for 90 days, twice a day until apparent satiation with semi-purified diets containing 0.0; 25; 50; 150; 300 or 600 mg.kg⁻¹ diet DL--tocopheryl acetate in a completely randomized design trial (n=4); biometrical and hematological data were collected and analyzed. Fishes fed with vit E diet (150 mg.kg⁻¹ ) showed higher (p<0.05) weight gain and specific growth. Hematocrit, erythroblast number and total plasma protein were increased (p<0.05) in fishes fed diet with no vit E diet. Vitamin E supplementation in artificial diets for pacu is essential for growth and maintenance of normal erythropoiesis.

Keywords
Fish nutrition, hematology, Piaractus mesopotamicus, vitamin E.