

Effect Of Flumequine On The Growth, Residual Measurements And Chromosomal Aberrations In Tilapia Fish.

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Abstract:Flumequine (Flu) is a powerful antibacterial agents used against bacterial infections in fish farming because of their high potency against Gram- negative bacteria the present work aimed to study the effect of different doses of flumequine (0, 6, 8, 12 mg during 90 days and 12 mg therapeutic does for 5 days) on growth performance, feed utilization, body consumption. Chromosomal aberrations and determination of flumequine residues in tissue of the tilapia fish. The results revealed the does of 10mg /Kg body weight caused significant increase in final body weight, body length, weight gain, specific growth rate and fed intake. Moreover, It improved feed conversion ratio with the same does whereas the other doses caused non- significant change in feed conversion ratio compared with control group. Also, the best protein efficiency ratio (1.95) was recorded by fish fed the diet with 10 mg /Kg body weight /day). Results of proximate analysis of whole fish bod showed that, the fish with dose 10 mg /Kg body weight / day gained the highest percentage of protein and the lowest percentage of moisture, fat and ash. Determination of flumequine residues in muscle of fish at the end of the experiment after three month showed negative results.

Flumequine at does of 10 mg /Kg body weight / day caused the lowest percentage in total chromosomal aberrations compared with the other doses that caused the highest percentage of total chromosomal aberration. In conclusion this study recommended the addition of flumequine to fish diets at a dose of 10 mg /Kg body weight / day as prophylactic dose in order to increase growth performance, feed utilization and decrease mortality of Nile tilapia.

Key words: .Flumequine – tilapia fish growth-performance – feed utilization – body composition –chromosomal aberrations –residues in tissue.