EFFECT OF LIGHT ON MORTALITY AND GROWTH OF EMBRYOS, LARVAE AND FRY OF CATFISHES, *CLARIAS GARIEPINUS* BURCHELL, 1822 AND *CLARIAS ANGUILLARIS* LINNAEUS, 1762

Mangalika Hettiarachchi
Dept. of Zoology, University of Kelaniya.

Fish embryos, larvae and fry that have no or very sparse pigmentation are extremely sensitive to ultra-violet light and to the rays of visible spectrum (Piper et al. 1982). Effect of light on mortality and growth of fry of *Clarias gariepinus* and *Clarias anguillaris* exposed to 12-hr period of light were investigated. Artificially fertilized eggs were incubated in black coloured glass aquaria which were illuminated from 6.00 a.m. to 6.00 p.m. with the help of flourescent tubes (20W). A group of eggs were incubated, away from direct artificial or sunlight, as the control.

The percentage mortality of embryos, larvae and fry exposed to light were significantly higher in both species (91.8-94.2%) than those not exposed to light (10.2-15.2%). At the end of 18 days the fry not subjected to light attained 11.8-12.3mm total length against 6.7-6.9mm in the affected groups. Liver damage which caused the swollen abdomens of the affected fry could also be implicated in this high mortality and poor growth rate. It is concluded that the artificially incubated eggs, larvae and fry of the two species of *Clarias* should not be exposed to bright light for better survival and growth.

References: Piper, R.G. McElwain, I.B., Orme, L.E., McCraren, J.F., Fowler, L.G. and Leonard, J.R. (1982). Fish hatchery management. United States Department of the Interior Fish and Wildlife Service, Washington, D.C. 577 pp.

This study was funded by the Federal Ministry of Education, Nigeria.