

The Effect of Exogenous Hormone Treatment on Spermiation in *Rhynchocypris oxycephalus* (Sauvage and Dabry)

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For the evaluation of hormonal control of spermiation in fish, a method to quantify the spermiation response of mature *Rhynchocypris oxycephalus* (Sauvage and Dabry) to hormonal therapy is described. Spermatocrit was determined after 7 min centrifugation at 18,000 ×g and sperm density was estimated by a standard hemocytometer method. Sperm density can be predicted from spermatocrit since their relationship is linear as described by the regression equation, $Y=3.68X-27.18$ ($R^2=0.82$, $N=50$), where Y is spermatocrit and X is sperm density. Milt production by mature *R. oxycephalus* was highest at 24 h after injection of 1,000 IU human chorionic gonadotropin (HCG) and 50 μg luteinizing hormone-releasing hormone analogue (LHRHa) per kg body weight. Increased milt production coincided with low spermatocrit and sperm density levels. These results demonstrate that spermiation in mature *R. oxycephalus* can be reliably evaluated by a spermatocrit method and that HCG and LHRHa are effective in stimulating of spermiation in this species.

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Source : J. World Aquacult. Soc. 33(4): 494-500, December 2002