NOTICE OF PUBLICATION

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Title: **Masculinization of Nile Tilapia (*Oreochromis niloticus* L.) Using Lypholized Testes from Carabao (*Bubalus bubalis carabanesis* L.) Bull (*Bos indicus* L.) and Boar (*Sus domesticus* L.)**

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Abstract: The study was conducted to evaluate the use of lyophilized testes from carabao (*B. b. carabanesis*), bull (*B. indicus*) and boar (*S. domesticus*) in the masculinization of Nile tilapia (*O. niloticus*) fry, specifically, their efficacy in producing phenotypic males and their influence on the growth and survival rate of Nile tilapia fry on a 28-day treatment period in outdoor tanks.

The experimental treatments evaluated were: Treatment I- lyophilized testes from carabao, Treatment II- lyophilized testes from bull, Treatment III- lyophilized testes from boar, Control I- methyltestosterone (MT)- treated diet and Control II- untreated diet. Percent phenotypic males, specific growth rate and survival rate were determined after 28 days of treatment in outdoor tanks.

Results revealed that Nile tilapia fry fed with MT-treated diet gave the highest percent phenotypic males with a mean of 96.67%. Those fry fed with lyophilized testes from bull, boar and carabao gave means 80.67, 79.33 and 72.67%, respectively. There was a significant difference ($P<0.05$) among the treatments. Based on the Chi-square test ($a \leq 0.05$), the higher percentages of males produced from androgen-treated fry which are significantly different from that of untreated fry showed that lyophilized testes diets and MTtreated diet were effective in masculinizing Nile tilapia fry.

Lyophilized testes from bull, carabao and boar gave higher specific growth rate of tilapia fry with means 15.85, 15.29 and 14.82%, respectively. Tilapia fry fed with lyophilized testes from carabao and boar did not differ significantly ($P>0.05$) from MT-treated fry but

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differed significantly ($P<0.05$) from those untreated fry. Those fry fed with lyophilized testes from bull were found to be significantly different ($P<0.05$) from the two controls. All the experimental treatments gave relatively high survival rate of the tilapia fry with no significant differences ($P>0.05$).

This abstract was excerpted from the original paper, which was published in Better Science, Better Fish, Better Life: Proceedings of the Ninth International Symposium on Tilapia in Aquaculture (2011) [Edited By: Liu Liping and Kevin Fitzsimmons] pg: 105-120

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