

EFFECTS OF FEEDING PRACTICES ON GROWTH AND  
FEED CONVERSION RATIO OF INDIAN CATTLE  
(*Clarke moorheadiana* & *C. griseolimus*) IN FIELD

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EFFECTS OF CONCENTRATION AND FEED SOURCE  
ON THE WEIGHT GAIN AND FEED CONVERSION RATIO



**EFFECTS OF FEEDING PRACTICES ON GROWTH AND  
FEED CONVERSION RATIO OF HYBRID CATFISH  
(*Clarias macrocephalus* x *C. gariepinus*) JUVENILE**

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## ABSTRACT

In order to culture hybrid catfish (*Clarias macrocephalus* x *C. gariepinus*) economically, this study was conducted to determine the optimum feeding rate (FR) and feeding frequency (FF) of hybrid catfish juvenile. Two experiments were arranged as complete randomized design with triplicate. Each experiment was completed within 42 days. Five FR [3, 5, 7, 9, and 12% body weight day<sup>-1</sup> (BW day<sup>-1</sup>)] were tested on hybrid catfish juveniles (1.53 ± 0.48 g and 6.2 ± 0.6 cm). Survival was not significantly affected by FR (p > 0.05). Specific growth rate (SGR) and feed conversion ratio (FCR) were significantly affected by FR (p < 0.05). Hybrid catfish juveniles fed on 7% BW day<sup>-1</sup> showed higher SGR than that of 5% BW day<sup>-1</sup> (p < 0.05) but had similarly lower FCR with 5% BW day<sup>-1</sup> (p > 0.05). Therefore 7% BW day<sup>-1</sup> is suggested as the optimum FR of hybrid catfish juveniles. Four FF (1, 2, 3, and 4 meals day<sup>-1</sup>) with optimum FR of 7% BW day<sup>-1</sup> were tested on hybrid juveniles (1.54 ± 0.13 g and 6.2 ± 0.2 cm). Survival was not significantly affected by FF (p > 0.05). The SGR and FCR of hybrid catfish juveniles were significantly improved with increasing of the FF from 1 meal to 3 meals day<sup>-1</sup> (p < 0.05). However, increases of FF from 3 meals to 4 meals day<sup>-1</sup> did not improved SGR and FCR of hybrid catfish juveniles (p > 0.05). The results suggested that 3 meals day<sup>-1</sup> is the optimum FF of hybrid catfish juveniles fed on FR of 7% BW day<sup>-1</sup>.

## ABSTRAK

Untuk memelihara ikan keli hybrid (*Clarias macrocephalus* x *C. gariepinus*) secara ekonomik, kajian ini dijalankan untuk menentukan kadar pemberian makanan dan kekerapan pemberian makanan yang optimum untuk juvenil keli hybrid. Dua eksperimen disusun secara rawak lengkap dengan tiga replikasi. Setiap eksperimen dijalankan selama 42 hari. Lima jenis kadar pemberian makanan (3, 5, 7, 9, dan 12% berat badan hari<sup>-1</sup>) diuji ke atas juvenil keli hybrid (1.53 ± 0.48 g dan 6.2 ± 0.6 cm). Kadar kemandirian tidak dipengaruhi oleh kadar pemberian makanan ( $p > 0.05$ ). Kadar pemberian makanan memberi kesan yang bererti kepada kadar pertumbuhan spesifik (SGR) dan kadar pertukaran makanan (FCR) juvenil keli kacukan ( $p < 0.05$ ). Juvenil keli hybrid diberi kadar 7% berat badan hari<sup>-1</sup> menunjukkan SGR yang lebih tinggi berbanding dengan kadar 5% berat badan hari<sup>-1</sup> ( $p < 0.05$ ). Namun tiada perbezaan yang bererti antara kadar 7% dan 5% berat badan hari<sup>-1</sup> ( $p > 0.05$ ). Maka, 7% berat badan hari<sup>-1</sup> adalah kadar pemberian makanan yang optimum kepada juvenil keli hybrid. Empat jenis kekerapan pemberian makanan (1, 2, 3, and 4 hidangan hari<sup>-1</sup>) diuji ke atas juvenile keli hybrid (1.54 ± 0.13 g and 6.2 ± 0.2 cm) dengan kadar pemberian makanan 7% berat badan hari<sup>-1</sup>. Kadar kemandirian tidak dipengaruhi oleh kekerapan pemberian makanan ( $p > 0.05$ ). Peningkatan kekerapan pemberian makanan daripada 1 hidangan kepada 3 hidangan hari<sup>-1</sup> ( $p < 0.05$ ) telah memperbaiki SGR dan FCR juvenil keli hybrid. Tetapi peningkatan daripada 3 hidangan kepada 4 hidangan tidak memberi kesan yang bererti ke atas SGR dan FCR juvenil keli hybrid ( $p > 0.05$ ). Maka 3 hidangan hari<sup>-1</sup> ialah kekerapan pemberian makanan yang optimum kepada juvenile keli hybrid.