





**EFFECT OF STARVATION PERIOD ON GROWTH  
PERFORMANCE AND BODY COMPOSITION  
OF AFRICAN CATFISH (*Clarias gariepinus*)**

**By  
Nor Shafazilah binti Kamal Bacha**

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**Department of  
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**FAKULTI AGROTEKNOLOGI DAN SAINS MAKANAN  
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Adalah ini diakui dan disahkan bahawa laporan ilmiah bertajuk:  
Effect of Starvation Period on Growth Performance and Body Composition of African  
Catfish (*Clarias gariepinus*)

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Sains Agroteknologi (Akuakultur), Fakulti  
Agroteknologi dan Sains Makanan, Universiti Malaysia Terengganu.

Disahkan oleh:

Penyelia Utama

Nama: MASDUKI MOHAMMAD MORNI  
Pensyarah  
Jabatan Sains Perikanan dan Akuakultur  
Fakulti Agroteknologi dan Sains Makanan  
Universiti Malaysia Terengganu  
21030 Kuala Terengganu

Cop Rasmi

Tarikh: 3/5/09

Penyelia Kedua (jika ada)

Nama:

Cop Rasmi

Tarikh: .....

## DECLARATION

I hereby that the work in this thesis is my own except for quotations and summaries which have been dully acknowledged.

Signature : .....  
Name : NOR SHAFAZILAH KAMAL BACHA  
Matric No : UK13720  
Date : 18 MEI 2009

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To anyone who would one day pick up this thesis from the shelves, I hope that it performs in ways not only for the purpose of reference but also a simple readable material to be enjoying with.

## ABSTRACT

The aim of this study was to evaluate the effect of starvation period on growth performance and body composition of African catfish, *Clarias gariepinus*. Fishes were fed to satiation twice a day for two weeks. After that, the fishes were starved for 30 days frequency of sampling. The result indicated that the condition factor and hepatosomatic index start decrease of the fish start decrease on day 7 and day 17 the fish starved respectively. However the survival rates for all treatments were not significantly different throughout this study. For the body composition, the lipid content decrease on day 5 the fish starved which is earlier than protein content which is start decrease on day 7 the fishes starved. The lipid content in muscle B (body muscle except around abdomen) and liver decreases first on day 5 than followed by and muscle A (muscle around abdomen) on day 30 the fishes starved. While the protein content in muscle A decrease first on day 7 and followed by muscle B on day 24 whereas there is no depletion on liver protein during 30 days starvation period.



## ABSTRAK

Kajian ini bertujuan untuk menilai kesan tempoh kelaparan terhadap pelaksanaan pertumbuhan dan komposisi badan bagi ikan keli Afrika, *Clarias gariepinus*. Ikan diberi makan sehingga puas dua kali sehari untuk dua minggu. Selepas itu, ikan dipuasakan selama 30 hari. Keputusan menunjukkan faktor kondisi pada ikan mula menurun pada hari ketujuh ikan dipuasakan dan indek heptosomatik menurun pada hari yang ke 17 ikan dipuasakan, dimana tiada perubahan pada kadar hidup. Untuk komposisi badan ikan pula, kandungan lipid menurun pada hari ke 5 ikan dipuasakan iaitu lebih awal dari kandungan protein iaitu pada hari ke 7 ikan dipuasakan. Kandungan lipid pada isi B (isi kecuali bahagian abdomen) dan hati terlebih dahulu menurun iaitu pada hari ke 5 dan diikuti kandungan lipid pada isi A (isi bahagian abdomen) pada hari 30 ikan dipuasakan. Sementara itu, kandungan protein pada isi A menurun terlebih dahulu pada hari ke 7 dan diikuti dengan kandungan protein pada isi B pada hari ke 24, tetapi kandungan protein pada hati tidak menunjukkan perubahan yang bermakna sehingga 30 hari ikan dipuasakan.