

Performance Characteristics of *Clarias Gariepinus* (Burchell, 1822) Raised in Different Culture Systems in Ibadan, Nigeria

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*Corresponding Author:
Nigeria.

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Abstract

The performance characteristics of *Clarias gariepinus* raised in small-scale commercial farming systems and seasonal culture systems and seasonal culture systems separated using Dunca and 35oC, Dissolved oxygen content throughout the rearing period, dissolved oxygen content, Weight measurement, The season of the year and effects ($p>0.05$) on the two culture systems gained in earthen ponds than conversion efficiency rate of *Clarias gariepinus* es

Key words: *Clarias g*

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Introduction

Aquaculture, beyond doubt, is the fastest growing food-producing sector in the world. The important role of aquaculture in providing aquatic animal protein to make up for the short fall in wild fisheries, and its socio-economic role in providing livelihood opportunities and economic security, particularly for the less-developed

regions of the world, is now strongly recognized globally (Rohana, 2002). Fish farming is the principal form of aquaculture and it involves raising fish commercially in tanks or enclosures, usually for food. In Nigeria fish are harvested through commercial fishing and aquaculture as well as importation. About 70% of fish consumed in Nigeria is imported. The remaining 30% is produced locally by

b = the exponent or growth

this relationship was expressed

ined empirically from the data.
plotted against the average ob-
e of parabola.

ined using the following equa-

.00

nd L are weight (gm) and length

weight

) = $L_2 - L_1$

| Length

th

Based on information obtained
of Nigeria, all active fish farms
surveyed. Six farms with the tv
tems (3 concrete tanks (CTs) ar
positively selected based on frequ
farms, record of management p
and production outputs were ob
Data were analysed using descri

Biological Evaluation

A total of 950 specimens of *Clari*
to 42.5cm) were used on a seaso
and condition factor of *Clarias*
measured and weighed to the n
(g) respectively using measurin

Length - Weight Measurement

A functional relationship betwe
established based on the followin

$W = a L^b$ (Huxley, 1924)

Where

W = weight in gram L =

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the following equation In
ank gave a correlation of 'r'
 $V = 19.587 + 0.087 \ln L$. The
gariiepinus under the two
' of 0.89 with the following
re correlation regression 'r'
r to 1. This means that the
t of the fish was high as the
also increases.

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	ASF
	Idi-Ishin
	Sole
y	Tertiary
e	Concrete Tank
	6
	9
i us	Clarias gariiepinus

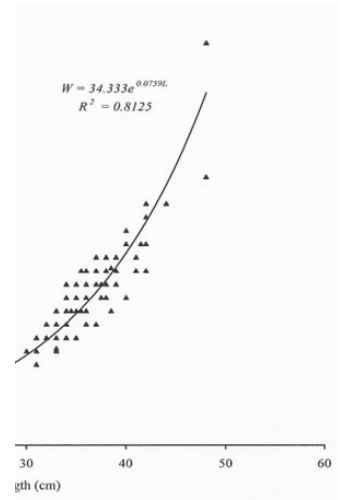
tonnes per production
(tonnes)

Culture Systems	Seas
Earthen Pond	We
	Dr
	Bot
Concrete Tank	We
	Dr
	Bot

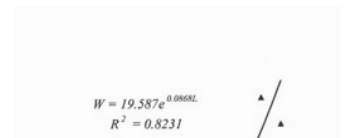
Table 2: Variation in Cor among C

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relationship of *Clarias gariepinus* in pond medium.



Growth rate(SGR) (%/ day)		
Feed conversion ratio	0.4	0.4
No of days for production	141	141

Table 6: Growth performance of *Clarias gariepinus* raised in different culture systems.

Conclusion

The fish showed high performance in different culture systems therefore, efficient management is seen as a better option for enhancing *Clarias gariepinus* especially in urban and rural areas. This study showed that the water was suitable for freshwater fish hence favourable for *Clarias gariepinus*.

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