

بسم الله الرحمن الرحيم

Sudan University of Science and Technology

College of Graduate Studies

***A Comparative study on the chemical and
Biometrical measurements of Wild & Cultivated
African catfish (Clarias gariepinus) in Sudan .***

دراسة مقارنة التراكييب الكيميائية و قياسات الجسم لسمكة القرموط (المستزرعة والبرية) في السودان.

*A thesis Submitted in partial for the requirement of Master degree
in Fish science and technology*

By

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DEDICATION

To my family....

To my Friends...

To my beloved Wife And my son...

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First of all my thanks and praise are devoted to Allah who gave me patience and will to accomplish this work. I would like to Express my sincere thanks and deep Gratitude to my Supervisor, Prof. Hassan Mohammed Adam for his guidance, continuous encouragement and help during all stages of this work. My deep thanks to all members of the Fisheries and

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Abstract:

This investigation was conducted to study fish species African Catfish (*Clarias gariepinus*) with the objective of comparing the proximate analysis and biometry measurement of farmed fish collected from Elseilad fish farm ministry of Agriculture and Animal wealth irrigation with their natural counter part of Nile River which was collected from Almorada fish market .

A total of 18 fish of each group was randomly obtained fresh from fish farm and Almorda fish market . Each group was chemically analyzed and was subjected concurrently to body weight and length measurement relationship .

The chemical composition analysis of major body constituents of studied fish (Protein, Fat , Moisture, dry matter , ash and NFE were determined. Protein and Fat contents level were found to be insignificantly different ($p < 0.05$) while the moisture and Ash content level was found to be significantly different .The study of standard length , total length ,fork length revealed a high variation and recorded a high significant different ($P > 0.01$) within studied groups in total length, standard length and fork lengt.

الملخص :

أجرى بيت هذه الدراسة تحليلي أسماك القروط و ذلك بمصادف
مقارنة التحليل الكيميائي و قياس الجسم للأسماك المستورعة و التي جمعت من
زرعة و زارة المزارعة و الثروة الحيوانية و السمكية بالسليط و فونت بتلك
الأسماك العرية و التي جمعت من فوق الوردية (أم طمان)

ثمانية عشر سمكة (قروط) تم الحصول عليها هي طرحة من زرعة

السليط و ق أسماك الوردية

أظهرت نتائج التحليل الكيميائي (بروتين ، دهون ، رطوبة ، رماد)

للأسماك المصروسة بان ليست هنالك فرق معنوية في محتوى البروتين و

الدهون بين الأسماك المستورعة العرية

، بينما وجد فرق معنوي كبير جدا في نسبة الرطوبة و محتوى الرماد ،

كذلك أظهرت نتائج الدراسة وجود نسبة اختلافات عالية جدا في الطول

الكلبي ، الطول القياسي و طول المؤنفة الأولية بين الأسماك المستورعة و

العرية

