

**Cairo University
Faculty of Veterinary Medicine
Department of Microbiology**

Bacteriological studies on lactic acid bacteria in cultured fresh water fishes.

**A Thesis presented by
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**For the Degree of Ph.D. of Veterinary Medical Sciences, Microbiology
(Bacteriology, Immunology and Mycology)**

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2015

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

(قَالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا مَا عَلَّمْتَنَا
إِنَّكَ أَنْتَ الْعَلِيمُ الْحَكِيمُ)

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Key Words: *Aeromonas*, Antimicrobial activity, , Fish, *Pseudomonas*

Abstract: Fifty (50) Nile tilapia (*Oreochromis niloticus*) and 50 Common carp (*Cyprinus carpio*) were screened for Lactic acid bacteria (LAB) using specific media. The Antibacterial activity of LAB was estimated against pathogenic bacteria (*Aeromonas caviae* and *Pseudomonas fluorescens*). The results indicated that the recovered LAB isolates from intestine of Nile tilapia and common carp were 13(26%) and 4(8%), respectively. The isolated species were *Lactococcus lactis*, *Lactobacillus animalis*, *Lactobacillus plantarum*, *Lactobacillus fermentum* and *Lactobacillus raffinolactis* recovered from Nile Tilapia intestine, whereas *Lactococcus lactis*, *Lactobacillus animalis*, *Lactobacillus acidophilus* were isolated from Common carp. LAB isolates had an antibacterial effect against *Pseudomonas fluorescens* and *Aeromonas caviae*.

Dedication

To

My Father,

My Mother,

My Brother,

My Sisters and

My Husband and lovely daughters.

ACKNOWLEDGMENT

Praise and thanks to ALLAH SUBHANHU WATAALA the most merciful for guiding and assisting me with out whose mercy and guidance this work would neither has been started nor completed.

*I would like to express my sincere and appreciation to supervisor of the present work **Prof. Dr. Nashwaa Abdel Salam Ezz Eldien** Prof. of Microbiology, Faculty of Veterinary Medicine, Cairo University , **Prof. Dr. Ahmed Mohamed Ahmed Ammar** Prof. of Microbiology Faculty of Veterinary Medicine Zagazig University ,**Dr. Ahmed Samir** Assistant Prof. of Microbiology Faculty of Veterinary Medicine Cairo University **Prof. Dr. Azza Mohammed Mohammed Abdel rahman** Prof. of Fish Health, Central Lab for Aquaculture Research, suggesting the point of the study, kind care during the progress of this work, continuous encouragement, constructive criticism throughout the course of study and preparation of the manuscripts and finishing this work.*

*And also, I would like to express my sincere gratitude and appreciation to **Dr. Ahmed Oraby** Lecturer of Microbiology Faculty of Veterinary Medicine, Cairo University, for helping me in identification of bacteria using PCR.*

Lastly, sincere thanks to staff members of Central Laboratory for Aquaculture Research, Abbasa, for great help during the work.

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