# SOME ADVANCED METHODS IN PROPAGATION OF SOME FRESH WATER FISH

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By

**Emad Mohamed Zidan Farag** 

# بعض الطرق المستحدثة في تفريخ بعض أسماك المياة العذبة

# رسالة علمية

مقدمة إلى الدراسات العليا بكلية الطب البيطرى - جامعة الأسكندرية إستيفاء للدرسات المقررة للحصول على درجة الماجستير في العلوم الطبية البيطرية

تخصص

التربية والإنتاج الحيواني

مقدمة من

ط. ب / عماد محمد زیدان فرج

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# لجنة الإشراف

الأستاذ الدكتور/ محمد محمد إبراهيم شرف أستاذ تربية وإنتاج الدواجن رئيس قسم رعاية الحيوان وتنمية الثروة الحيوانية كلية الطب البييطري – جامعة الأسكندرية

الأستاذ الدكتور/ محمد عبدالبارى مندور أستاذ تربية وإنتاج الدواجن قسم رعاية الحيوان وتنمية الثروة الحيوانية كلية الطب البييطرى – جامعة الأسكندرية

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## **SUPERVISOR'S COMMITTEE**

#### Prof. Dr. Mohamed Mohamed Ibrahim Sharaf

Professor of Poultry Breeding and Production Head of Department of Animal Husbandry and Animal Wealth Development Faculty of Veterinary Medicine Alexandria University

## Prof. Dr. Mohamed Abd El – Bary Mandour

Professor of Poultry Breeding and Production Department of Animal Husbandry and Animal Wealth Development Faculty of Veterinary Medicine Alexandria University

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### **Ш – LIST OF ABBRVIATIONS**

Bw: Body weight Fed: feddan

m<sup>-2</sup>: per square meter m<sup>2</sup>: square meter SH: spawning hapa CH: conditioning hapa

M: meter

DWG: Daily weight gain SGR: specific growth rate g fish<sup>-1</sup>: gram per fish

g: gram

Batch<sup>-1</sup>: per batch Day<sup>-1</sup>: per day SR: survival rate µl: microliter T: testosterone

E<sub>2</sub>: 17 beta estradiol

ng: nanogram pg: pictogram ml<sup>-1</sup> : per milli

mg dl<sup>-1</sup>: mg per deciliter

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