

شبكة المعلومات الجامعية







شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



شبكة المعلومات الجامعية

# جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

### قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها على هذه الأفلام قد أعدت دون أية تغيرات



يجب أن

تحفظ هذه الأفلام بعيدا عن الغبار في درجة حرارة من ١٥-٥٠ مئوية ورطوبة نسبية من ٢٠-٠٠% To be Kept away from Dust in Dry Cool place of 15-25- c and relative humidity 20-40%



# بعض الوثائـــق الإصليــة تالفــة



# بالرسالة صفحات لم ترد بالإصل

# SEX CONTROL IN FISH BY SEX STEROID HORMONES

BY

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B.Sc. Agri. Sci. (Poultry Production), Ain Shams Univ.,1993

thesis submitted in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

In

Agriculture (Poultry Physiology)

Poultry Production Department Faculty of Agriculture Ain Shams University

1999



#### Approval Sheet

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#### ABSTRACT

Ahmed Saney El-Din Mohamed Sadek. Sex control in fish by sex steroid hormones. Unpublished Master of Science in Poultry Production (Poultry Physiology), Department of Poultry Production, Faculty of the Agriculture, Ain Shams University, 1999.

The effect of the synthetic male hormone  $17\alpha$ -methyltestosterone (MT) was studied on Nile tilapia *Oreochromis niloticus* phenotypic sexual differentiation.

Fourty five hundreds undifferentiated Nile tilapia fry were divided into four experimental groups and control. For the first and second groups, 7days old fry were fed on 60 ppm MT treated feed for 21 and 28 days, respectively. For the third and fourth groups, 14 days old fry were fed on 60ppm MT treated feed for 21 and 28 days, respectively. The fry of the control group were divided into two subgroups, one was fed on diet without hormone and solvent and the other was fed on ethanol treated feed and was utilized as a vehicle control. Fry were fed at approx. rate of 20% of body weight twice daily.

At 100 days of age fish were dissected, the gonads were classified on the basis of microscopic appearance. The dissected gonads were stained by aceto – carmine squash method. Ovarian tissue was positively identified by the presence of oocytes.

The hormonal treatment resulted in male population ranged from 79.4 to 98.9% as compared to 53% for the control. Hormonal treatment—resulted in higher body weight, total body length, body weight gain, growth rate and survival—rate than control.

**Key words:** monosex, sex differentiation, Nile tilapia, growth rate, survival rate.

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#### **ACKNOWLEDGEMENTS**

The author would like to express his sincere gratitude and thanks to Dr. Maie F. Ali, Professor of Poultry Physiology and Head Department of the Poultry Production, Faculty of Agriculture, Ain Shams University for her close supervision, help and in suggesting the problem, continued guidance during the research study, preparation and writing of this manuscript.

Also, I wish to express my deepest appreciation and gratitude to Dr. M.A. El-Zieny professor of Poultry nutrition, Department of Poultry Production, Faculty of Agriculture, Ain Shams University. For his supervision.

Thanks are due to Dr. U. M. Ali, Assistant Professor of Poultry Breeding, Department of Poultry Production, Faculty of Agriculture, Ain Shams University for Supervision and valuable help in the statistical analysis of the data.

Also my deep gratitude and thanks are due to Mr. H. Hashim and Dr. I. Radwan for their helping and providing materials of this study.

Additionally, I would like to express my thanks to all staff members of El-Amal fish hatchery Kafr El-Shiekh Governorate for their great help during the experimental work.

Finally, I would like to express special gratefulness to my family especially to my father, Dr. S. Sadek, for his valuable advices and moral support, which made all this possible.

