



Faculty of Women for Arts
Science and Education
Zoology Department

HORMONAL AND BIOCHEMICAL EFFECTS OF WILD-CAUGHT FISH AND FARMED FISH ON MALE ALBINO RATS

Thesis

submitted for the partial fulfillment of Ph.D. degree of Science
(Zoology)

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LIST OF ABBREVIATIONS

ADP	: Adenosine Diphosphate
AIN-93M	: American Institute of Nutrition -93 for Maintenance
ANOVA	: Analysis of Variance
As	: Arsenic
ATP	: Adenosine Triphosphate
b.w.	: Body Weight
BMD	: Bone Mineral Density
BMI	: Body Mass index
Ca⁺⁺	: Calcium
CAPMAS	: Central Agency for Public Mobilization and Statistics
Cd	: Cadmium
CHD	: Coronary Heart Disease
CHE	: Cholesterol Esterase
CHOD	: Cholesterol Oxidase
CIHEAM	: Central International de Hautes Etude Agronomiques Mediteraneennes
Cm	: Centimeter

CNS	: Central Nervous System
Conc.	: Concentration
CP	: Crude Protein
Cr	: Chromium
Cu	: Copper
CVD	: Cardiovascular Diseases
D	: Day
DHA	: Docosahexaenoic Acid
DNA	: Deoxyribonucleic Acid
E₂	: Estradiol
EDB	: Ethylene Dibromide
ELISA	: Enzyme-Linked Immunosorbent Assay
EPA	: Eicosapentaenoic Acid
FAO	: Food Agriculture Organization
FDA	: Food and Drug Administration
Fe	: Iron
Fig.	: Figure
FSH	: Follicle-Stimulating Hormone
FT₃	: Free Tri-iodothyronine
FT₄	: Free Thyroxine
GAFRD	: General Authority for Fish Resources Development

Gm	: Gram
GnRH	: Gonadotropin Releasing Hormone
GPD	: Glycerophosphate Dehydrogenase
GSI	: Gonadosomatic Index
Ha	: Hectare
HDL-C	: High Density Lipoprotein Cholesterol
H&E	: Hematoxylin and Eosin
Hg	: Mercury
H₂O	: Water
H₂O₂	: Hydrogen Peroxide
H₂SO₄	: Sulphuric Acid
HRP	: Horseradish Peroxidase
HSD	: Hydroxy Steroid Dehydrogenase
IGF-I	: Insulin-like Growth Factor-I
IR	: Insulin Resistance
IU/ml	: International Unit per milliliter
Kg	: Kilogram
LDL-C	: Low Density Lipoprotein Cholesterol
LH	: Luteinizing Hormone
m	: Meter
m²	: Square Meter
m³	: Cubic Meter