

# بسم الله الرحمن الرحيم





# شبكة المعلومات الجامعية التوثيق الالكتروني والميكرو فيلم





# جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

## قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها  
علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات



## يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار





# بعض الوثائق الأصلية تالفة







بالرسالة صفحات  
لم ترد بالأصل



B I N C V A

# **MODULATORY EFFECT OF STRESS ON REPRODUCTIVE FUNCTIONS IN FEMALE RATS**

*A Thesis Presented*

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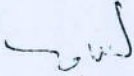
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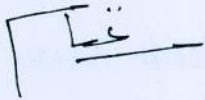
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## LIST OF ABBREVIATIONS

ACTH:	Adrenocorticotrophic hormone
ALT:	Alanine aminotransferase
AST:	Aspartate aminotransferase
BP:	Blood pressure
BPM:	Beat per minute
CNS:	Central nervous system
CRF:	Corticotrophin releasing hormone
EEG:	Electroencephalogram
EDTA:	Ethylene diamine tetracetic acid
EOP:	Endogenous opioid peptides
EPI:	Epinephrine
FSH:	Follicular stimulating hormone
GnRH:	Gonadotrophin releasing hormone
Hb:	Haemoglobin
LH:	Luteinizing hormone
MAP:	Medroxy progesterone
MT:	Metallothionein
NAL:	Naloxone
NE:	Norepinephrine
PCV:	Packed cell volume
PHS:	Preparturient hypogalactia syndrome
PMSG:	Pregnant mare's serum gonadotrophin
RBCs:	Red blood corpuscles
SDLI:	Serum digoxin like immunoreactivity
TBARS:	Thiobarbituric acid-reactive substance
WBCs:	White blood corpuscles

# *Introduction*



## INTRODUCTION

Endocrine control of the reproduction in female animals is mediated by the hypothalamo-pituitary-ovarian axis. In response to environmental factors or external stimuli, the hypothalamus produces gonadotrophin releasing hormone which leads to the secretion of gonadotrophins i.e. luteinizing hormone (LH) and follicle stimulating hormone (FSH) from the anterior pituitary. The gonadotrophins in turn regulate the secretion of oestradiol and progesterone from the ovary. These ovarian steroids, through their negative or positive feedback on the higher brain centers, hypothalamus or pituitary, regulate the secretion of gonadotrophins and maintain normal reproductive cycle.

The animal is said to be in a state of stress if it is required to make abnormal or extreme adjustment in its physiological or behavioural status in order to cope with adverse aspects of its environment and management (*Fraser, 1980*).

There were three stages of mammalian stress responses which are: (1) resistant, in which the animal attempts to regain its original level or homeostasis; (2) adaptation, in which a new level of homeostasis develops under the influence of chronic stress; (3) exhaustion, when the animals exhaust their reserves of energy, hormone precursors and the other factors which needed to maintain the new homeostasis (*Takashi, 1981*).

An increase in adrenal corticosteroid secretion, as reflected by increased plasma corticosteroid concentrations, has been widely used as an index of stress in many species including rats (*Barlow et al., 1979*).