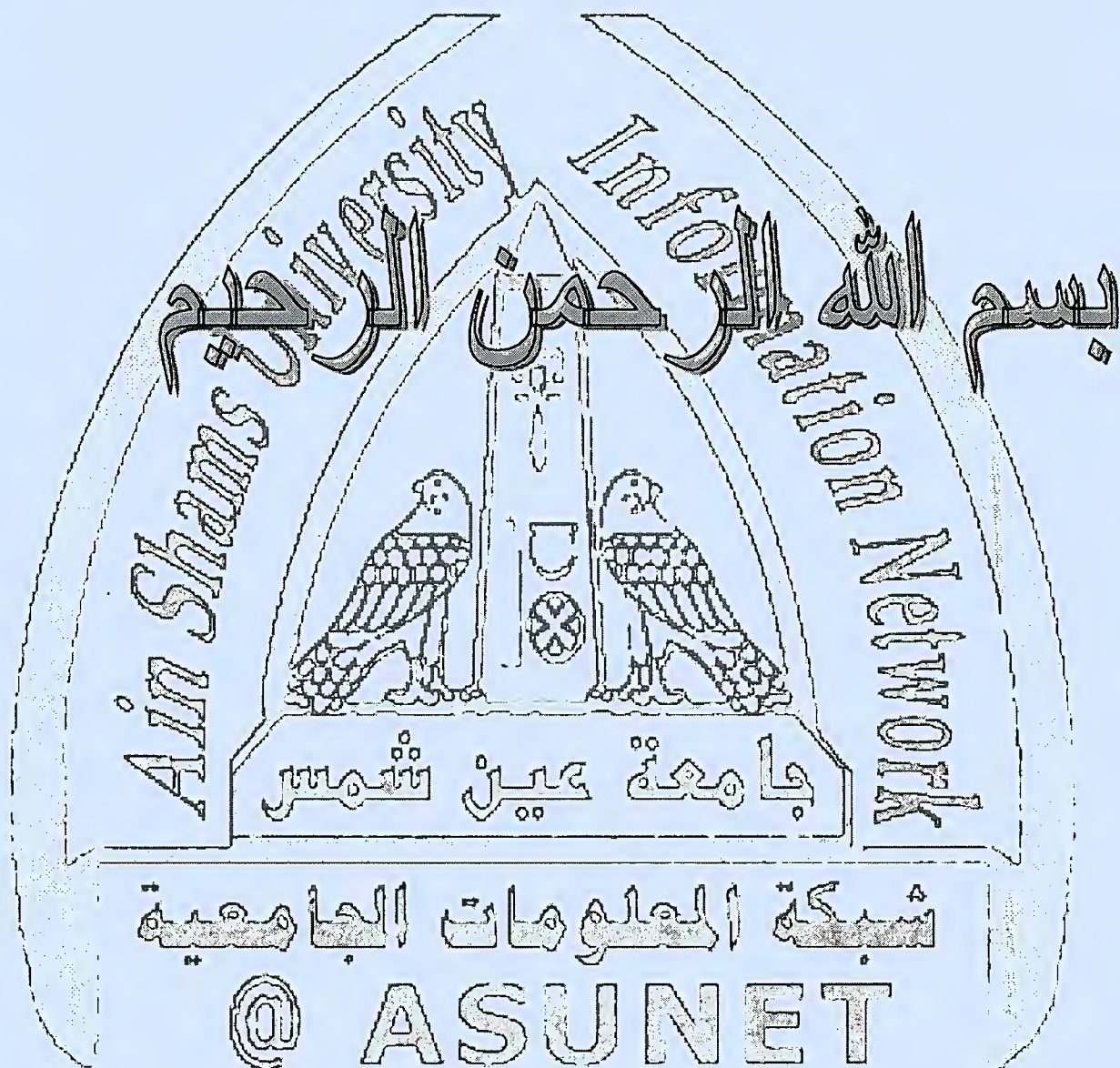




شبكة المعلومات الجامعية





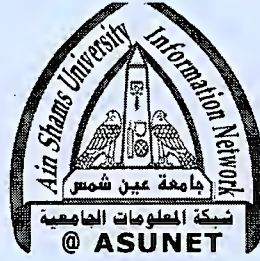
شبكة المعلومات الجامعية

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التوثيق الالكتروني والميكرو فيلم

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شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم

بعض الوثائق الأصلية تالفة

BEHAVIOURAL AND BIOCHEMICAL STUDIES ON THE FLESHFLY
***Wohlfahrtia nuba* (WIEDEMANN) IN UPPER EGYPT.**

A THESIS

PRESENTED FOR THE DEGREE OF DOCTOR OF

PHILOSOPHY OF SCIENCE

(ENTOMOLOGY)

To

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ASSIUT UNIVERSITY

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1994



DEDICATION
TO
my husband and our daughters
" Heba and Radwa "

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CONTENTS

CONTENTS

	Page
INTRODUCTION.....	1
HISTORICAL REVIEW.....	3
A- MATING BEHAVIOUR.....	3
B- MATING REFUSAL.....	5
C- MATING RECEPTIVITY.....	6
D- EFFECT OF DIET ON SEXUAL ACTIVITY.....	7
E- OLFACTOMETER DEVICES.....	7
F- PRESENCE OF A SEX PHEROMONE.....	8
G- EXTRACTION AND COLLECTION OF SEX PHEROMONE.....	10
H- ROLE OF SENSE ORGANS IN PHEROMONE PERCEPTION.....	12
I- LOCATION OF SEX PHEROMONES PRODUCING ORGANS.....	13
J- TYPES OF SENSE ORGANS.....	14
MATERIAL AND METHODS	16
A- REARING TECHNIQUE.....	16
B- EVIDENCE OF PHEROMONE PRODUCTION.....	17
C- EXTRACTION AND BIOASSAY PROCEDURES.....	17
D- SEPARATION OF LIPIDS.....	19
Thin-layer chromatography (TLC).....	19
E- PURIFICATION OF FEMALE SEX PHEROMONE.....	20
1- Column chromatography of crude extracts of <i>W. nuba</i>	
flies.....	20
2- High performance liquid chromatography (HPLC).....	20
F- MICROSCOPICAL PREPARATIONS.....	20
EXPERIMENTAL RESULTS.....	22
A- BEHAVIOURAL STUDIES.....	22
1- MATING BEHAVIOUR.....	22
a- Male-female courtship behaviour.....	22
b- The relationship between the sexual activity of	
males and their age.....	23
c- Effect of diet on the mating activity.....	24
d- Effect of repeated mating upon frequency and	
duration of copulation.....	25
e- Interrupted mating and the effect of length of	
copulation on the degree of insemination.....	27

f-	Effect of age and mating status of females on mating behaviour and pheromone production.....	28
g-	Polygamy in female <i>W. nuba</i>	30
h-	Effect of time of copulation on the percentage of remating of females.....	31
i-	Behaviour of decapitated and ligated female.....	32
i-	Remating after decapitation.....	32
ii-	Remating after ligation.....	35
2-	EVIDENCE OF AN ATTRACTIVE PHEROMONE RELEASED BY FEMALES.....	36
a-	Evidence of attraction of the males by the females.	36
b-	Non-evidence of attractive effect of males to the females.....	37
3-	ROLE OF A VOLATILE FEMALE SEX PHEROMONE IN STIMULATING MALE COURTSHIP BEHAVIOUR.....	38
a-	Presence of chemical substance (sexual pheromone)..	38
i-	Mating responses of male <i>W. nuba</i> to dead females.	38
ii-	Degree of attraction of male to dead larvae.....	39
iii-	Relationship between the mating response of male with dead females at different ages.....	40
b-	Pheromone extraction.....	41
i-	Pheromone extraction by different solvents.....	41
ii-	Effect of different concentration of extracted female pheromone on male response.....	42
iii-	Effect of mated female pheromone extract on male response.....	44
iv-	Effect of mated and virgin male extract on male response.....	45
4-	THE ROLE OF VISION AND OLFACTION IN MATE LOCATION BY MALES OF <i>W. nuba</i>	46
a-	Effect of male vision and female movement on the mating process.....	46
b-	Location of olfactory receptors.....	48
i-	Effect of removal of male antennae and maxillary palpi.....	48
ii-	Effect of removal of male legs on the mating process.....	49

iii- Effect of removal male legs and both antennae and maxillary palpi on the mating process.....	51
B- BIOCHEMICAL STUDIES.....	53
1- Separation of lipids.....	53
Thin layer chromatography (TLC) of crude extract.....	53
2- Purification of female sex pheromone	53
a- Effect of cuticular lipids or hydrocarbon fractions from females (6 day-old) on male response.....	53
b- High performance liquid chromatography (HPLC).....	54
C- MICROSCOPICAL STUDIES.....	56
1- Description of male antennae.....	56
2- Description of male maxillary palpi.....	56
3- Morphological studies of the legs of <i>W. nuba</i> males...	56
DISCUSSION AND CONCLUSION	59
SUMMARY.....	74
REFERENCES.....	85
ARABIC SUMMARY	

INTRODUCTION

INTRODUCTION

In recent years, a wide spread interest has developed in insect attractant and other pheromone. Much of this interest has been stimulated recently by the successful characterization of the sex attractants of several species of insects. This interest has also been stimulated by the emphasis now, being given to research on insect pheromone. Because manipulation of an insect's sexual behaviour presents a considerable potential for biological control, a sexual pheromones could be used as a tool in population surveys and in the suppression of many dipteran pest species in order to protect the environment from pollution resulting from the intensive use of chemicals.

Although the sex pheromones of Diptera have been researched extensively, no informations on the existence and role of sex pheromones in sexual behaviour of the flesh flies *Wohlfahrtia nuba* (Wiedemann) were recorded.

W. nuba flies are considered as external parasites attacking and causing myiasis in wild fur animals and are very strongly attracted by certain odours. The chief occupation of the females are to deposit larvae and most of their activities were connected with this function. The fact that, *W. nuba* flies mated successfully in the darkness (Khedre, 1991) suggesting that an olfactory stimulus may be involved.

As flesh flies depend on their smell for survival, mating and larviposition, the purpose of this research is to give some informations:-

- 1- On whether a sex pheromone is present in the female or male *W. nuba*, and, if present, to evaluate its role in courtship behaviour.
- 2- On the elements of courtship displayed by sexually stimulated males.
- 3- On the possible relationship between protein feeding and activity of males and receptivity of females *W. nuba*,
and also,
- 4- To investigate the phenomenon of female mating refusal.
- 5- To examine the effect of sex, mating and age on pheromone mediated copulatory responses.
- 6- To undertake a biochemical studies, in an attempt, to collect and separate the biological active components in female or male flies and to evaluate their activities.
- 7- To give an evidence on the presence of chemoreceptors, and to locate the sites involved in the perception of olfactory stimuli.