



**Ain Shams University
Faculty of Science
Department of Entomology**

Evaluation of Chemical Control Measures Against Sand Flies And Its Impact Upon Leishmania Transmission In Some Areas Of Libya

A Thesis Submitted
For the Award of the Degree of
Doctor of Philosophy of Science
In Entomology

By

Mostafa Ramadhan Esboee Dokhan
M.Sc. - Entomology

**Department of Entomology
Faculty of Science
Ain Shams University
Cairo, Egypt
2015**



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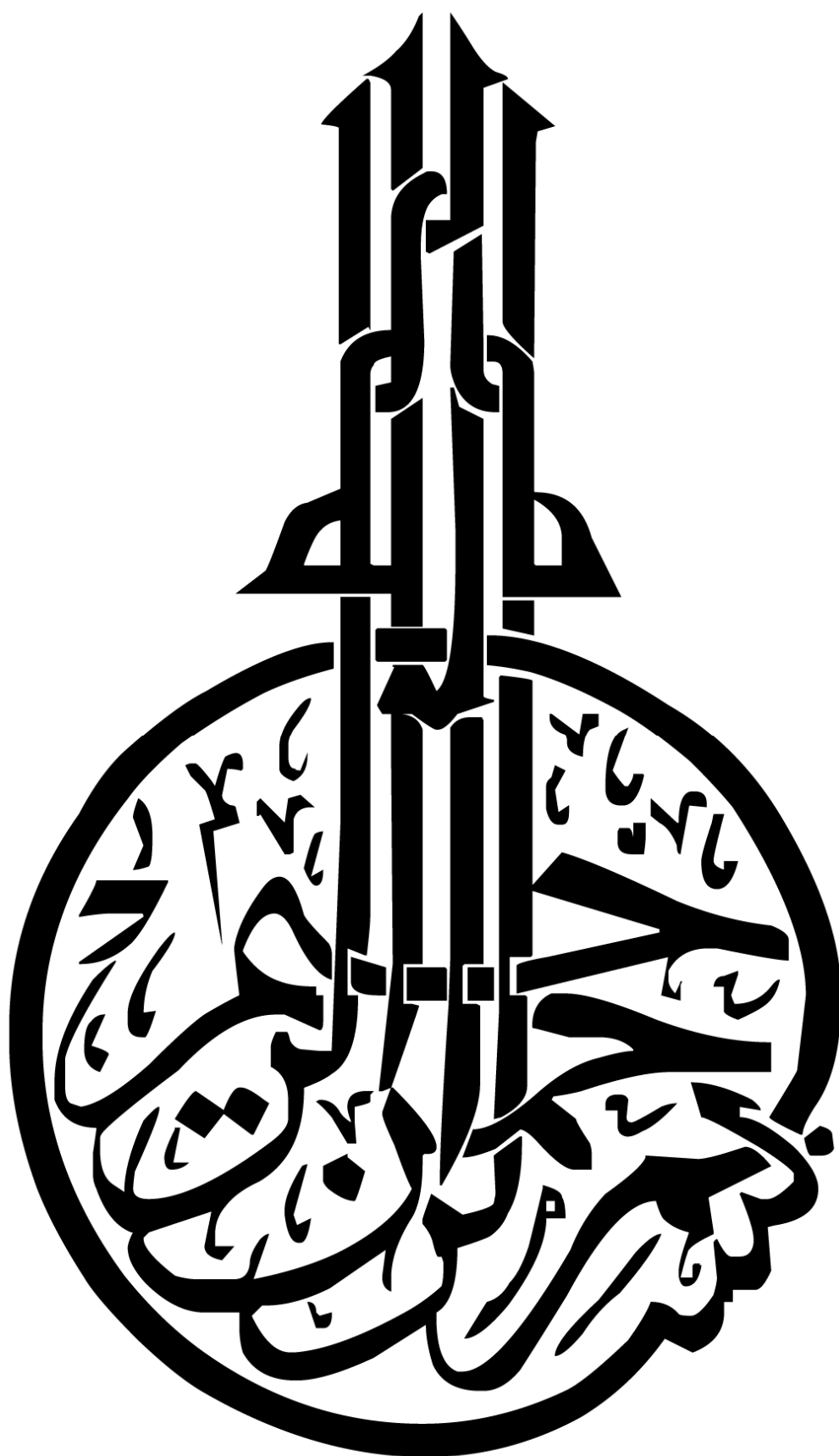
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Dedication

To my parents, the ones who can never ever be thanked enough for the overwhelming love and care they bestow upon me, and who have supported me financially as well as morally and without their guidance it was impossible for me to complete my higher education.

To my wife, who has been struggling with me, hand by hand, to secure and shape brighter future.

To 'the beats of my heart,' my children, Abd Alrahim and Aya, who are the only source of inspiration to me, their love and innocent smiles that made the hardship of this task bearable.

To my brothers, sisters and the entire family.

Acknowledgement

Acknowledgement

First of all, all praise and thanks are due to the Almighty *Allah* who always guides me to the right path and has helped me to complete this thesis.

I wish to express my deepest thanks and gratitude to *Dr. Mohamed A. Kenawy*, Prof. of Medical Entomology, Entomology Department, Faculty of Science, Ain Shams University, Cairo, Egypt for suggesting the topic of this Thesis, his advice, kind encouragement, constructive criticism and for reviewing the manuscript.

I would like to express my deepest gratitude to *Prof. Badereddin B. Annajar*, Head of the Public Health Department, Faculty of Medical Technology, University of Tripoli and Director of National Center of Disease Control, Ministry of Health, Tripoli, Libya, for sharing in suggesting the research topic, his endless help, offering facilities, serious supervision of the work and for his valuable criticism and advice that made this study possible.

I would like to express my deepest gratitude to *Dr. Said A. Doha* and *Dr. Shabaaan S. El-Hosary*, Research and Training Centre on Vectors of Disease, Ain Shams University, Cairo, Egypt and to *Dr. Taher A. Shaili*, Zoology Department, faculty of Science, University of Tripoli and National Center of Disease Control, Ministry of Health, Tripoli, Libya for their continuous help, encouragement and direct guidance of the work.

I would like to thank the technical staff of the National Programme for Leishmaniasis Control, the National Centre for Disease Control, Tripoli, Libya specially *Anwar Abu Bakr Mantaser*, *Saleh Abdul Samad al-Shibli*, *Ahmad Osman Mrsukh*, *Mohammed Youssef Shaaban*, *Ali Gaddafi Rifai*, *Nur Addin Rashid* and *Walid Al-Saadawi* for assisting in field studies, and to the rest of the workers in the National Centre for Disease Control for their support and encouragement during this study.

Last but not least, I expand my thanks to the staff members of the Entomology Department, Faculty of Science, Ain Shams University, , Cairo, Egypt specially *Prof. Adel K. El Said*, Head of the Department, to *Prof. Magda H. Radi*, ex-Head of the Department, to *Mrs. Sawsan Moustafa* and *Mrs. Fatma Abdel Moneam* for their help and support.



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LIST OF ABBREVIATIONS

ACL:	Anthroponotic cutaneous leishmaniasis
ANOVA:	Analysis of Variance
ATSB:	Attractive Toxic`Sugar Baits
AVL:	Anthroponotic visceral leishmaniasis
CDC:	Center of Disease Control
CL:	Cutaneous leishmaniasis
CSR:	Communicable Disease Surveillance and Response
DNA:	Deoxyribo Nucleic Acid
EMR:	Eastern Mediterranean Region
EC:	Emulcifiable Concentrate
F.:	Family
IRS:	Indoor Residual spray
ITNs:	Insecticide Treated Bednets
L.:	<i>Leishmania</i>
MCL:	Mucocutaneous leishmaniasis
NE:	North-East
NW:	North-West
O.:	Order
P.:	<i>Phlebotomus</i>
PCD:	Passive Case Detection
PCR:	Polymerase Chain Reaction
RE:	Al Rabta East
RH:	Relative Humidity
RW:	Al Rabta West
RTC:	Research and Training Center on Vectors of Diseases
S.:	<i>Sergentomyia</i>
SSP:	Smith's Statistical Package
TDR:	Tropical Diseases Research
Temp.:	Temperature
ULV:	Ultra Low Volume
VL:	Visceral leishmaniasis
WHO:	World Health Organization
ZCL:	Zoonotic cutaneous leishmaniasis
ZVL:	Zoonotic visceral leishmaniasis
