CURRICULUM VITAE

PERSONAL DATA

Name: Hamadttu Abdel Farag El-Shafie

Title: Assistant Professor (**PhD**)

Nationality: Sudanese

Date and Place of Birth: Jan. 1962, Gillas (Village in Northern Sudan).

Marital Status: Married, a father of five children (one boy and four girls).

Religion: Muslim

Address: Department of Crop Protection, Faculty of Agriculture, University of

Khartoum, Shambat, P. Code 1334, Sudan

Present Address: Date Palm Research Center of Excellence, King Faisal University

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EDUCATION BACKGROUND AND PROFESSIONAL PREPARATION

1969-1975: Primary School (Gillas).

1975-1978: Intermediate School (Um Boukol)

1978-1982: High School (Korti).

1982: Sudan High School Certificate.

1982: Admission at Faculty of Agriculture, University of Khartoum.

1988: B.Sc. (Agric.) Honors University of Khartoum.

1993: M.Sc. (Agric.) University of Khartoum (Entomology).

1997-1998: The German language course in Bremen (October-March).1998: Ph.D. Candidate (DAAD Scholarship) University of Giessen.

2001: Ph.D. in Agriculture, University of Giessen (Germany).

PRIZES AND SCHOLARSHIPS

1. Dr. Tothill prize for best all round students passing out of the faculty.

2. Sudan Agricultural Bank prize for best final year student in Crop Protection.

3. Abu El Gasim shield prize for best final year student in practical agriculture.

4. German academic exchange service (DAAD) scholarship for M.Sc. (1991-1993)

- 5. German academic exchange service (DAAD) scholarship for German language course in Bremen, Germany (October 1997- March 1998)
- 6. German academic exchange service (DAAD) scholarship for PhD in Germany (April 1998-November 2001)
- 7. German academic exchange service (DAAD) scholarship for short visit to attend the international Summer school on organic farming, University of Gottingen (31.8.2002-16.9.2002)
- 8. German academic exchange service (DAAD) scholarship for study and research visit, University of Giessen, Germany (1.4.2006-2.6.2006)

LANGUAGE (WRITTEN AND SPOKEN)

- Arabic (mother tongue).
- English (Excellent in both written and spoken).
- German (good in both written and spoken).
- French (a little bit).

COMPUTER LITERACY

MS Office: Words, Excel, Power Point...etc.

TEACHING ACTIVITIES

1- UNDERGRADUATE LEVEL COURSES TAUGHT

Course Title	University	Class	Duration
General entomology (Lab)	Khartoum	1 st Year	1987-1997
Economic entomology (lab)	Khartoum	1 st Year	1987-1997
Agric. Zoology (Lab)	Khartoum	1 st Year	1987-1997
Forest entomology (Lab)	Khartoum	Final Year	1987-1997
General entomology (Lab)	Khartoum	Final Year	1990-1997
Plant pathology (Lab)	Omdurman Isla. Univ.	M.Sc.	1990/1991
General entomology (Theory)	Khartoum (B.Sc.)	2 nd Year	2001-Till
General biology (Theory)	Faculty of Animal	2 nd Year	1995/1996
	Production (U of K)		
Agric. Zoology (Lab)	Faculty of Animal	2 nd Year	1995/1996
	Production (U of K)		
Acarology (Theory)	Khartoum (Forestry)	2 nd Year	2001-2005
Insect morphology (Theory)	Khartoum	Final Year	2004-Till
Insect physiology	Khartoum	Final Year	2004-20081
Apiculture (Theory)	Khartoum	4 th Year	2001-2006
Insect ecology (Theory)	Khartoum (Diploma)	1st Year	2002-2006
Insect physiology (Theory)	Khartoum (diploma)	1st Year	2002-2006
Desert locust ecology (Theory)	Khartoum (Diploma)	1 st Year	2002-2006
Insect collection and preservation	Khartoum (Diploma)	2 nd Year	2003 - 2006
(Theory)			
Recent trends in pest control (Theory)	Khartoum (Diploma)	2 nd year	2003-2006
Biological Lab techniques (Theory)	Khartoum (Diploma)	3 rd year	2003-2010
Field training	Khartoum (B.Sc.)	Final year	2003 - 2006

2- GRADUATE LEVEL COURSES TAUGHT

Course Title	University	Duration
Insect physiology and behavior 3(3+0)	Khartoum (M.Sc.)	2006-2010
Desert locust ecology 3(2+1)	Khartoum (Higher Diploma)	2007-2010

SUPERVISION OF UNDERGRADUATE STUDENTS

Degree	Major	Academic year	No. of Students
Final Year Project	Entomology	2002/2003	4
Final Year Project	Entomology	2003/2004	2
Final Year Project	Entomology	2004/2005	2
Final Year Project	Entomology	2005/2006	3
Final Year Project	Entomology	2006/2007	2
Final Year Project	Entomology	2007/2008	2
Final Year Project	Entomology	2008-2009	3

CONTRIBUTIONS TO POSTGRADUATE STUDENTS THESIS EXAMINATIONS

No of students	Degree	University
51	M.Sc.	University of Khartoum
1	Ph.D.	Omdurman Islamic University
2	M.Sc.	Sudan Academy for science and technology
1	Ph.D.	Sudan Academy for science and technology
4	M.Sc.	University of Kordofan
2	M. Sc.	Sudan University for science and technology
1	Ph.D	Al-Azhari University

AWARDED M.Sc. THESIS

No	Name	Title	Year
1	Hiba Bushara	Effects of Bacillus thuringiensis aizawai, NeemAzal-T/S and	2007
	Hamad	Spinosad on potato tuber moth, <i>Phthorimea operculella</i> (Zeller) (Lepidoptera: Gelechiidae)	
2	Loai Effects of <i>Bacillus thuringiensis Var. aizawai</i> and NeemAzal-		2006
	Mohammed Alamin	T/S against the immature stages of the African bollworm Helicoverpa armigera (Huebner) (Lepidoptera: Noctuidae)	
3	Mohammed	Responses of Aphis fabae (Hom.: Aphididae) and its	2005
	Abdalla	stenophagous predator, Cheilomenes propingue Mul.	
	Suliman	(Coleoptera: Coccinellidae) to neem Azadirachta indica seed	
		water extract	
4	Munthir	Effect of different products from the neem tree <i>A. indica</i> A.	2004
	Towfeeg Himat	Juss on the hatchability of the eggs of the white fly <i>Bemesia</i>	
		tabaci (Genn.) (Homoptera: Aleyrodidae)	
5	Montasir omer	Insecticidal effects of different neem formulations and Bacillus	2005
	Mahgoub	thuringiensis Var. aizawai on the immature stages of the	
		greater wax moth Galleria mellonella L.(Lep.: Pyralidae)	
6	Elfatih Elnour	Contact and systemic effects of different neem formulations	2003
	Abdalla	(Azadirachta indica A. Juss) on the ladybird beetle	

		Hippodamai variegata Goeze (Coleoptera: Coccinellidae)	
7	Talib Salim	Performance profile of Metarhizium anisopliae and neem oil	2005
	Douka	against the 3 rd and 4 th nymphal instars of the desert locust	
		Schistocerca gregaria Forskal (Orthoptera: Acrididae) under	
		semi-field conditions	
8	Ebtisam	Effect of neem oil and Metarhizium anisopliae against some	2005
	Mohammed	immature stages of the desert locust Schistocerca gregaria	
	Bashir	Forskal (Orthoptera: Acrididae) under lab conditions	
9	Habeballa	Effects of topical application of different neem formulations	2005
	Hassab Elrasoul	on the nymphal stages of the desert locust Schistocerca	
		gregaria Forskal (Orthoptera: Acrididae)	
10	Elzain Ali	Abundance and biomass of epigeal predatory arthropods in an	2007
	Elfaig	alfalfa (Medicago sativa) field in Shambat	
11	Amel	Monitoring and habitat location of the weaver bird Quelea	2008
	Abdelrahman	quelea aethiopica using remote sensing and geographic	
	5 1 11	information system (GIS)	• • • • • • • • • • • • • • • • • • • •
12	Badreldin	Efficacy of biopesticides for the management of key pests	2008
12	Abdalla	damaging tomato <i>Lycopersicon esculentum</i> L.	2006
13	Nadia	Use of natural substances as alternatives to synthetic pesticides	2006
1.4	Abdelwahab		2000
14	Afag Abdel	Effect of storage conditions and duration on the efficacy of	2009
	mouty	neem seeds as an insecticide	
1.5	Mohammed		2000
15	Muna	Insecticidal and antifeedant effects of rehan, Ocimum	2009
	Mohmmed Ali	basilicum L. on adults of the aphid predator Hippodamia	
16	Muna Alamin	variegata Goeze (Coleoptera; Coccinellidae)	2009
10	Ibrahim	Effect of food source on some growth and developmental parameters of the red flour beetle <i>Tribolium castaneum</i> Herbst	2009
	101allilli	(Coleoptera: Tenebrionidae)	
17	Mahgoub	Use of Teflubenzuron alone and combined with <i>Metarhizium</i>	2009
1 /	Mousa	anisopliae and Phenylacetonitrile (PAN) as control agent	2007
	Mohammed	against the desert locust <i>Schistocerca gregaria</i> Forskal	
	Monaninca	agamst the desert focust semistocerea gregaria Poiskal	

PhD THESIS

1	Mahadi	Efficacy of four systemic insecticides against the green pit	Awarded
	Abdelrahman	scale insect, Palmapsis phoenicis Ramachandra Rao	2008
	Ahmed	(Homoptera: Asterolecaniidae) infesting date palm in Northern	
		Sudan	
2	Naiema Eltayeb	Isolation and characterization of entomopathogenic strains of	Awarded
	Gorashi	Bacillus thuringiensis from Sudan	2010
3	Ebtisam	Use of Jatrova oil (Jatrova curcas) for the control of the	Awarded
	Mohammed	desert locust Schistocerca gregaria Forskal (Orthoptera:	2012
	Bashir	Acrididae)	
4	Mohammed	Bioefficacy of argel, Solenostemma argel (Del.) against	Awarded
	Osman	selected stored product insects	2014
5	Hassab Allah	Performance of locally isolated strains of B.t. against the	Writing
	Mohammed	sorghum bug Agonosceles pubescens (Thunberg) (Hemiptera:	up
		Pentatomidae)	

PROFESSIONAL APPOINTMENTS

- 1988: Teaching assistant at the Dept. of Crop Protection (University of Khartoum).
- 1993: Promoted to the status of lecturer teaching general and applied entomology for the agricultural students, in addition to insect morphology.
- 2001: Promoted to the status of assistant professor of entomology. Teaching Acarology, Zoology and Entomology courses for the undergraduate students beside insect physiology and vertebrate of economic importance for the postgraduate students (M.Sc.)

SABBATICAL APPOINTMENT

2010: Senior Research Entomologist and head of sustainable management program in date palm, Date Palm Research Center of Excellence, King Faisal University, AL-Hassa, Kingdom of Saudi Arabia.

CURRENT RESEACH INTEREST

- Control of insect pests by natural substances and synthetic insecticides acting systemically. Evaluation of traditional methods of using neem products in the management of vegetable pests. Developing economic thresholds adaptable to the farmers of some major field pests.
- Promotion of biological pest control and integrated pest management and organic farming. Elucidation of the negative impact of using chemical pesticides on the natural enemies of pests.
- Population ecology of epigeal predatory Arthropods, Carabids, Staphylinids and Spiders. Studying the species composition of these important groups of arthropods as well as their biodiversity and the factors responsible for regulating their population. Evaluation of the role of these epigeal predatory arthropods in regulating the population of crop pests.
- Sustainable Management of major date palm pests particularly the red palm weevil *Rhynchophorus ferrugineus*. Pheromone mediating aggregation and semiochemical ecology of red palm weevil and exploitation of these behavioral responses in the integrated management of this notorious pest. Chitin biosynthesis and Inhibition in RPW. Development of RNAi and RNAi-Based Control of RPW.

CONFERENCES, WORKSHOPS AND PUBLICATIONS

- Participated and attended more than 25 workshops and conferences in the period from 1998 to 2007 in the field of crop protection and published 30 papers in peer reviewed international and local journals (See attached list).
- Active member in many national and foreign entomological societies.

CONSULTANCY WORK

- Team member (crop protection specialist) with University of Khartoum Consultancy Corporation, participated in conduction of technical and feasibility study of Kihalia Sharig resettlement project 2005.
- Consultant for a Sudanese-Iranian project in the field of crop protection. The
 main task included lectures on the appropriate methods for using agrochemical
 pesticides and IPM packages adapted for the farmers.
- Consultant for many feasibility studies on beekeeping projects (private) in both small and large scale.
- Consultant for the federal Ministry of Agriculture in the field of Management of Fruit flies and Pests Damaging Vegetables and Wheat.
- Consultant for the Sudanese federal Ministry of Agriculture on the management of pests damaging sugarcane, field crops and horticultural crops including citrus, mango, banana, and date palms.
- Consultant for the Sudanese standards and metrology organization (SSMO) on quarantine pests
- Consultation for the Ministry of Agriculture, Saudi Arabia on red palm weevil and other date palm pests
- Resource person for FAO in the field of red palm weevil management
- Trainer for Agric. Engineers in GCC Countries "surveillance methods of date palm pest" during the period from January 27th to 31st 2013 in Dubai, UAE organized by ICARDA.

ADMINISTRATIVE ACTIVITIES IN THE UNIVERSITY OF KHARTOUM

- Member of the board of crop protection department (since 1993 up to the present)
- Member of the Faculty board, Faculty of Agriculture (2007-2010)
- Representative of the Faculty of Agriculture in the council of agricultural and veterinary medicine studies, graduate college (2008-2010)
- Representative of the Faculty of agriculture in University examinations and prizes committee (2008-2010)
- Representative of the Faculty of Agriculture in the Admissions committee, University of Khartoum
- Secretary general of the Faculty of Agriculture research board (2008-2010)
- Member of the senate of the university of Khartoum (2007-2010)
- Director of the training farm of the Faculty of Agriculture (2004-2007)
- Coordinator of postgraduate Diploma in Desert Locust (2007-2008)
- Head, Department of Crop Protection (2006-2008)
- Member of heads of departments' board, Faculty of agriculture (2007-2010)

- Member of the Faculty of Agriculture academic reform committee (2007-2010)
- Member of the academic committee, Faculty of Agriculture (2008-2010)
- Head of the examination committee, Faculty of Agriculture (2008-2010)
- Deputy Dean for academic affairs, Faculty of Agriculture (2008-2010)

BOARDS, COUNCILS, SOCIETIES AND COMMITTEES MEMBERSHIPS

- 1. Member of the Sudanese Agricultural council
- 2. Member of the Sudanese Agricultural Engineers Union
- 3. Member of the Sudanese crop protection society
- 4. Member of Sudanese beekeeping society
- 5. Member of Sudanese environmental conservation society
- 6. Member of Arab Society of Plant Protection
- 7. Member of the German society of plant protection and plant health (DPG)
- 8. Member of the African Association of Insect Scientists (AAIS)
- ⁹. Member of the international society for horticultural science (ISHS)
- 10. Member of Alumni portal- Germany and Sudanese German Association
- 11. Member of the National Committee for organic farming and organic products. The main task is to formulate a national policy for organic farming in the Sudan including product quality standards and certification.
- 12. Cooperation with the German embassy in assessment and evaluation of Ph.D. proposals submitted for sandwich scholarship as well as interview of Ph.D. candidates.
- 13. Member of the national organic agricultural movement of Sudan (NOAMS) (2002 until the present)
- 14. Member of the national committee for organic standards and organic production system (2002 until the present)
- 15. Member of the organizing committee of the university of Khartoum graduation ceremony for the academic year 2009/2010
- 16. Member of the committee for rehabilitation of student hostels (2002-2003)
- 17. Supervisor of the crop protection students' society (1997-2010)
- 18. Supervisor of the agricultural students' society (2003-2010)
- 19. Head of the committee for interviewing the newly admitted students of the faculty of Agriculture, University of Khartoum (2008-2010)

- 20. Member of the academic committee for camel research center, university of Khartoum (2008-2010)
- 21. Member of the examiners' board, Faculty of Agriculture (1994-2010)
- 22. Member of the examiners' board, Faculty of Animal production, University of Khartoum (2002-2010)
- 23. Member of the examiners' board, Faculty of Forestry, University of Khartoum
- 24. Coordinator of collaboration between the Faculty of Agriculture, U.O.K and the national network for culture, education and training (2008-2010)
- 25. Member of the academic reform committee, Faculty of agriculture, university of Khartoum (2008-2010)
- 26. Member of the committee for curricula revision, department of plant protection, college of agriculture, Sudan University for science and technology (2008-2009)
- 27. Member of the technician Recruitment committee, university of Khartoum (2008-2010)
- 28. Member of the council of Agricultural and veterinary studies, graduate college, University of Khartoum (2008-2010)
- 29. Member of the committee for agricultural, veterinary studies and natural resources, national council for higher education and scientific research, Ministry of higher education (2009)
- 30. Member of Shambat Agricultural training centerboard of directors (2008-2009)
- 31. Member of the organizing committee for the graduate studies and scientific research conference 27/2-2/3/2010
- 32. Member of the committee for the establishment of the University of Khartoum staff club (2007-2010)
- 33. Member of the field training committee for the final year students, faculty of agriculture, university of Khartoum (2003-2009)
- 34. Supervisor of the academic tours (more than 12) for the agricultural students, Faculty of Agriculture, university of Khartoum (1994-2010)
- 35. Member of the committee for revision of the abstracts of scientific papers submitted to graduate studies and scientific research conference 27/2- 2/3/2010
- 36. Member of the committee for interviewing the newly admitted students, Faculty of agriculture, university of Khartoum (2008-2010)
- 37. Member of the committee for the establishment of criteria for upgrading the intermediate diploma to Bachelor degree, Faculty of Agriculture (2009-2010)

- 38. Member of the committee for establishment of curriculum of the faculty of agriculture and forestry, university of Rumbeik, Ministry of higher education (2009)
- 39. Member of the committee for the establishment of criteria for selection of exchange students, Faculty of agriculture, university of Khartoum (2008-2010)
- 40. Member of the organizing committee for Arab food security symposium (17-19/3/2009)
- 41. Member of the steering committee for English language workshop, Sharigha Hall, University of Khartoum
- 42. Member of the organizing committee for a workshop on organic farming, Sudanese standards and meteorology organization SSMO (Dongla, Northern State-2009)
- 43. Member of the organizing committee for a workshop on organic farming, Sudanese standards and meteorology organization SSMO (River Nile state and Friendship hall)
- 44. Member of Khartoum university delegation for preparation and signing of memorandum of understanding between the university and Elie Group Company (9/10/2009)
- 45. Member of the committee for implementation of the recommendation put by the deans' committee 2 for the academic year 2009/2010, University of Khartoum
- 46. Member of the committee for writing proposal the development and improvement of the practical curricula, Faculty of Agriculture, University of Khartoum
- 47. Member of the committee for collaboration between the Faculty of Agriculture and Khartoum north district (Formed by the commissioner of Bahri locality)
- 48. Member of the committee for cultural collaboration between the Faculty of Agriculture and El-Neema cultural corporation- Shambat (2008-2010)
- 49. Member of the committee for evaluating the implementation of the new academic rules (2010), Faculty of Agriculture, UOK
- 50. Member of the committee for investigating the cases of students violations of the university examination rules, UOK (2008-2010)
- 51. Member of the academic staff services committee, Shambat complex
- 52. Member of the committee for studying the possibility of growing wheat in Khartoum State, Ministry of agriculture (2008-2010)
- 53. Member of the committee assigned for the establishment of a new building complex for the academic staff of the University of Khartoum (2009)

- 54. Member of the internal and external class tour committee, Faculty of Agriculture, UOK.
- 55. Member of the Entomological Society of America (ESA)
- 56. Member of research and post-graduates committee of date palm research center of excellence, King Faisal University
- 57. Member of secretariat committee of the fifth symposium on date palm in Saudi Arabia, November 2013.
- 58. Head, sustainable management of date palm pests research program
- 59. Member of the quality assurance committee of Date palm research center of excellence, King Faisal University
- 60. Coordinator for patents and publications of Date Palm Research Center of Excellence (DPRC), King Faisal University
- 61. Coordinator of DPRC for Khalifa International Date Palm Award file preparation

SHORT-TERM VISIT, TRAINING AND FELLOWSHIPS

- Three-month stay at the University of Giessen, Germany Institute of Phytopathology and applied entomology April-June 2005.
- Two-weeks visit at the University of Goettingen, Germany, Institute of Agricultural Engineering, Summer School on Organic Farming, 2004.
- Two-weeks visit at the University of Adana, Turkey, Department of Crop Protection, 2004.
- One-week visit to the Institute of Organic Farming and the International Center of Insect Physiology and Ecology (ICIPE), Nairobi, Kenya, 2006.

SYNERGISTIC ACTIVITIES

- A. Reviewer for articles submitted to the following journals:
- 1. International journal of Agricultural science research
- 2. Agriculture and biology journal of North America
- 3. International journal of agriculture and biology
- 4. International journal of microbiology research
- 5. Agricultural research journal
- 6. Pakistan Journal of zoology
- 7. International journal of biochemistry and biotechnology
- 8. Scientific journal of King Faisal University
- 9. World journal of Agricultural sciences
- 10. University of Khartoum journal of agricultural sciences
- 11. International journal of tropical insect science
- 12. International journal of agricultural policy and research
- 13. Indian Journal of plant protection (Editorial board)
- 14. Archives of phytopathology and plant protection

- 15. Bulletin of Entomological Research
- 16. Bulletin of Insectology
- 17. Journal of Agricultural and Crop Research
- 18. University of Kordofan Journal of natural Resources and Environmental Studies
- B. Reviewer for promotion files of the staff of the Agricultural Research Corporation (ARC)
- C. Consultant for Curricula Reform and Revision in many Sudanese Universities.
- D. Member of the Editorial board of the Indian Journal of Plant Protection

INTERNATIONAL RESEARCH LINKS, COLLABORATORS AND OTHER AFFILIATIONS

- 1. Dr. Mark Hoddle and Dr. Christina Hoddle, University of California- Riverside, USA. Collaboration on studies of flight activity and dispersal characteristics of the red plam weevil, weevil *Rhynchophorus ferrugineus* (Olivier) in Al-Ahsa, kingdom of Saudi Arabia (2011-2012).
- 2. Dr. Agenor Mafra-Neto, ISCA Technology, California, Riverside, USA. Collaboration in the field-testing of specialized pheromone and lure application technology (SPLAT) against the red palm weevil in date palm plantation.
- 3. Dr. Cam Oehlschlager from Chem Tica International, Costa Rica. The collaboration with DPRC is on the development of repellents for the red palm weevil.
- 4. Prof. Esmat Hegazi, biological control specialist, Alexandria University, Egypt. Collaboration on the use of two species of Trichogramma (egg parasitoids) and one species of the braconid larval parasitoid to control *Ephestia cautella* infesting stored dates.
- 5. Prof. Naiquin Zhang, Kansas State University, USA (specialist in sensors and Controls). Collaboration on using machine vision for automatic assessment of biological control effectiveness of *Trichogramma bourarachae* against *Cadra cautella* Using Machine Vision
- 7. Prof. Dr. Jose L. Toca-Herrera, Prof. Dr. Josel Glossl and Prof. Dr. Falk Liebner from the Biophysics laboratory, Department of NanoBiotechnology, BOKU University, Austria. Collaboration on detail studies of chemical composition of date palm varieties known to be resistant to the red palm weevil, aiming at identification of resistant factors
- 8. Prof. Dr. Thies Basedow, institute of Phytopathology and Applied Zoology, University of Giessen, Alter Steinbacher Weg 44 D-35394 Giessen, Germany

- 9. Prof. Dr. Joseph A. Jacas, University of Jaume I, Spain, characterization of date palm dust mites and their natural enemies in Al-Ahsa region.
- 10. Prof. Dr. Jose Romeno Faleiro, Mariella, Arlem-Raia, Salcette, Goa-403 720, India, collaboration on the management of the red palm weevil in date palm plantations
- 11. Prof. Dr. Thomas Perring, Dept. of Entomology, University of California, Reiverside, California, USA. Co-authoring an invited book chapter on major lepidopteran pests of date palm.
- 12. Prof. Dr. Jorge Pena, Dept. of Entomology and Nematology, Tropical Research and Education Centre, University of Florida, Homestead, Florida, USA.

FUNDED RESEARCH PROJECTS (PI & Co-PI)

- 1. Integrated management of Fruit flies damaging mango in Khartoum State (2010-2012, funded by the Ministry of Higher Education-Sudan
- 2. Developing Red Palm Weevil Rhynchophorus ferrugineus (Olivier) IPM Technology in Date Palm Agro-ecosystems of Saudi Arabia (2010-2012) funded by Saudi Aramco company. The major tasks of the project include understanding semio-chemical attraction, testing pheromone-trapping protocols, screening date palm cultivars resistant to red palm weevil, rearing of the Red palm weevil in the laboratory, and area-wide management of the weevil.
- 3. Assessment of repellent and insecticidal effects of certain chemical compounds against red palm weevil *Rhynchophorus ferrugineus* (Olivier) (2010-2012) funded by the Deanship of Scientific Research, King Faisal University, KSA
- 5. The abundance and diversity of epigeal arthropods in the date palm agro-ecosystem of Al-Hassa oasis. (2015) funded by the Date palm research center of excellence, King Faisal University.
- 6. Methyl bromide alternatives to control *Ephestia cautella* (Walker) in stored dates (Project No. PC-1 funded by Ministry of Higher Education, through the date palm research center of excellence, KSA.
- 7. Automatic assessment of biological control effectiveness of *Trichogramma* spp. Against *Ephestia cautella* under laboratory conditions using machine vision. Funded through the date palm research center of excellence.
- 8. Internal thermal and chemical characteristics of date palm infested by the red palm weevil *Rhynchophorus ferrugineus* Olivier. Funded through the Deanship of Scientific Research, King Faisal University, KSA

- 9. Molecular cloning of a chitinase gene from the red palm weevil *Rhynchophorus ferrugineus Olivier* (Coleoptera: Curculionidae). Funded by the Date Palm Research Center of Excellence and Deanship of Scientific Research, King Faisal University.
- 10. Design of a novel solar powered insect trap for IPM program of major date palm Pests. Funded by the Date Palm Research Center of Excellence, King Faisal University.

CONTRIBUTION TO COMMUNITY SERVICES

- 1. Providing crop protection extension services to vegetable growers, owners of warehouses and fruit growers in different states of Sudan
- 2. I have been involved in a farmers' participatory approach to assess farmers' knowledge, attitude and practices relating to the management of vegetable pests in different parts of Sudan
- 3. I have had successful experience in development of beekeeping in Sudan through essays written particularly for beekeepers and young researchers (Magazine for young researchers)
- 4. Participation in DAL company weekly symposium on organic farming (lectures on crop protection in organic farming system)
- 5. Farmers' field day on management of red palm weevil-Al-Fudul- Al-Ahsa, KSA, 4 July 2011.
- 6. Training workshop for agric. Engineers with the title "Management and performance analysis of RPW-IPM program in Al-Ahsa" Saudi Arabia. 11th July 2011. Date palm research center of excellence, King Faisal University.

LIST OF PUBLICATIONS

THESES

- 1. El Shafie, H. A. F., 1992. Studies on some factors affecting pollen gathering activity of honey bees *Apis mellifera* L. (Hymenoptera: Apidae) under Shambat conditions, M. Sc. (Agric.), University of Khartoum, Sudan
- 2. EL-Shafie, H. A. F. (2001). The use of neem products for sustainable management of homopterous key pests on potato and eggplant in the Sudan. Ph.D. (Agric.) University of Giessen, Germany: http://geb.uni-giessen.de/geb/volltexte/2001/516/pdf/d010119.pdf

PAPERS IN REFREED JOURNALS

3. M. S. Hoddle, C. D. Hoddle, J. R. Faleiro, **H. A. F. EL-Shafie**, D. R. Jeske and A. A. Sallam, (2015). How Far Can the Red Palm Weevil, Rhynchophorus ferrugineus (Coleoptera: Curculionidae), Fly?: Computerized Flight Mill Studies with Field Captured Weevils. J. Econ. Entomol. 108(6): 2599-2609; DOI: 10.1093/jee/tov240

- 4. El-Shafie, H.A.F. (2015). Biology, Ecology, and Management of the Longhorn Date Palm Stem Borer *Jebusaea hammerschmidti* (Coleoptera: Cerambycidae). *Outlooks on Pest Management* 26(1): 20-23. (DOI: 10.1564/v26 feb 06)
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PATENT

Title of invention: A repellent against the red palm weevil, *Rhynchophorus ferrugineus*. The patent is in collaboration with Chem Tica International Company and Date palm research center of excellence, King Faisal University, (filed) GC2014-27894, filing date, 8.9.2014.

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