



#### Curriculum Vitae

## **Personal Details:**

Name El-Sayed Abdel-Malek El-Sheikh

➤ Professor of Pesticides Biotechnology and Molecular Toxicology

➤ Coordinator of the National Committee of Toxicology, ASRT

➤ Member in Zagazig University Ethics of Animal Care and Use

Committee (ZU-IACUC)

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# **Summary of Qualifications:**

- B.Sc in Agricultural sciences (Plant Protection) in June, 1996, Faculty of Agriculture,
   Zagazig University.
- M.Sc in Agricultural sciences (Pesticides Toxicology) in October, 2001, Faculty of Agriculture, Zagazig University. The thesis title is (Risk assessment of a pest control agent).
- PhD in Agricultural sciences (Pesticides Biotechnology and Molecular Toxicology) in March, 2006, Faculty of Agriculture, Zagazig University. The thesis title is (Biosafety of a pest control biotechnology agent).

# Awards received and grants:

- <u>Visiting Scholar</u> in Entomology Department and Cancer research Center Pesticide Biotechnology laboratory, UCDavis, California, USA, 2022.
- <u>Visiting Professor</u> in Entomology Department and Cancer research Center Pesticide Biotechnology laboratory, UCDavis, California, USA, 2014-2015.
- <u>Visiting scholar</u> in Entomology Department and Cancer research Center UCDavis, California, USA, 2011-2012.
- Research scholar in Missouri University Biological control of insect research laboratory, Agriculture research service, USDA, 2010.
- Junior Specialist in Entomology Department and Cancer research Center UCDavis, USA, 2008.
- <u>Post-Doc Fellowship</u> in Entomology Department and Cancer research Center UCDavis, funded from Ministry of Higher Education and Scientific Research,, Egypt, 2007-2008.
- **Ph.D. Scholarship**, Ministry of Higher Education and Scientific Research, Egypt, 2003.
- <u>Certificate of Recognition</u> from University of California Davis, for working in USA as J1
   Visiting Scientist, with University of California Davis, July, 2008.
- State prize of encouragement in Agricultural science, Ministry of Scientific Research, Egypt, 2014.
- Excellence medal of the first class was awarded by the President Abdul-Fattah Al-Sisi in August, 2017.
- Many years award of international publication from Zagazig University.

#### Membership of Professional Association and International Journals:

## Reviewer in ELSEVIER journals:

- **Reviewer** in Annals of Agricultural Science (Hosted by Elsevier).
- **Reviewer** in Biocatalysis and Agricultural Biotechnology (Elsevier)
- **Reviewer** in Ecotoxicology and Environmental Safety (Elsevier)
- **Reviewer** in Journal of Insect Physiology (Elsevier).
- **Reviewer** in Crop Protection (Elsevier).
- **Reviewer** in Chemosphere (Elsevier).

## • Reviewer in <u>WIELY</u> journals:

• Reviewer in Pest Management Science (Wiley).

# • Reviewer in **SPRINGER** journals:

Reviewer in Environmental Science and Pollution Research (Springer).

## • Reviewer in <u>Taylor and Francis</u> journals:

• **Reviewer** in Drug and Chemical Toxicology (Taylor & Francis).

# • Reviewer in MDPI journals:

- **Reviewer** in Sustainability Journal (MDPI).
- Reviewer in Food Journal (MDPI).
- **Reviewer** in Molecules Journal (MDPI).

## Reviewer in <u>Frontiers</u> journals:

• **Reviewer** in Frontiers in Public Health Journal (Frontiers).

# • Reviewer in different <u>INTERNATIONAL</u> journals:

- Reviewer in International Journal of Environmental Engineering (IJEE).
- Reviewer in Scientific journal of Agricultural Sciences-Bani Sweif University.
- **Reviewer** in Journal of Stored Products and Post-harvest Research.
- Reviewer in International Journal of Tropical Insect Science.
- Reviewer in International Journal of Anatomy and Physiology.
- **Reviewer** in Journal of Agricultural and Crop Research.
- **Reviewer** in Romanian Biotechnological Letters (RBL).
- Reviewer in African journal of microbiology research.
- Reviewer in Agricultural Science Journal-Mansura University.
- Reviewer in African journal of agricultural research.
- **Reviewer** in Royal Society of Chemistry Advances.
- Reviewer in Journal of Medicinal Plant Research.
- **Reviewer** in African Journal of Biotechnology.
- Reviewer in Biopesticides Journal.
- Reviewer in Science alert Journals (Research Journal of Environmental Toxicology,

Journal of Environmental Science and Technology, Journal of Biotechnology, Journal of Entomology, Journal of Biological Sciences, International Journal of Poultry Science).

# Membership:

- **Member** in the Society for Risk Analysis (membership ID # 99247).
- **Member** in the Society of Chemical Industry (membership ID# 72765).
- **Member** in the Egyptian Society of Biological Pest Control.
- **Member** in the Egyptian Society of Entomology.
- Member in the following committees and groups (Applied Risk Management, Decision Analysis and Risk, Ecological Risk Assessment, Foundational Issues in Risk Analysis, Occupational Health and Safety, Risk and Development)

#### Editorial Board:

- **Guest Associate Editor** in *Frontiers in Public Health*.
- **Associate Editor** in *Microbial Bioactive journal*.
- **Editorial Board member** in *Journal of Entomology and Zoology Studies*.
- **Editorial Board member** in *Zagazig Journal of Agricultural Research*.
- **Editorial Board member** in *Journal of Biopesticides*.
- Technical Editor in different journals of Science Alert (Research Journal of Environmental Toxicology, Journal of Environmental Science and Technology, Journal of Biotechnology, Journal of Biological Sciences).

## fields of Interest:

- Pesticides biotechnology and molecular toxicology (target and metabolic enzymes).
- Biopesticides and chemical pesticides screening and bioassays.
- Insect molecular biology and physiology and pest control.
- Environmental Toxicology of Pesticides.
- Pesticides analysis and residues.
- Control of insect and microbial pests.

## Different Skills:

## 1- Computer skills:

Obtaining International Computer Driving Licence (ICDL) in 22-7-2004 issued by the UNESCO in the following modules as well as teaching ICDL to both Agriculture and

Veterinary medicine Students during 2008-2010.

- Basic concepts of information technology.
- Using the computer and managing files.
- Information and communication.
- Word processing.
- Spreadsheets.
- Presentation.
- Database.

## 2- Molecular biology skills:

- High experience with Colorimetric (Spectrophotometer), Immunoassay (ELISA), and Chromatography (GC and HPLC) methods.
- Electrophoresis: SDS-PAGE, IEF, 2-Dimentional, native & agarose gel.
- Insect molecular biology of gene cloning and expression.
- Protein isolation and characterization.
- Purifying of DNA& RNA techniques.
- Immunoassay techniques.
- P.C.R techniques.

# **Professional Experience:**

- Teaching practical courses for the undergraduate students in the plant protection department from March, 1998 to May, 2006 such as pesticides toxicology, pesticide analysis, entomology, general zoology, pest control and insect biochemistry, and other practical courses related to pesticides.
- *Teaching theoretical courses:* I am teaching the following theoretical courses for undergraduate and postgraduate students; Pesticides Toxicology, Pesticides Analysis, Entomology, Zoology, Pest Control, Insect Biochemistry, Pesticides Resistance, Biocides, Insect Viruses, Biotechnology and other courses related to pesticides.
- *Professor (full)* of pesticides biotechnology and toxicology at Department of Plant Protection, Faculty of Agriculture, Zagazig University from November 29, 2016 until now.
- Associate Prof. of pesticides at Department of Plant Protection, Faculty of Agriculture,
   Zagazig University from October 25, 2011 until November 28, 2016.
- Assistant Prof. (Lecturer) of pesticides at Department of Plant Protection, Faculty of Agriculture, Zagazig University from May 23, 2006 until October 24, 2011.
- Assistant lecturer of Pesticides at Department of Plant Protection, Faculty of Agriculture,

- Zagazig University from December 30, 2001 until May 22, 2006.
- Demonstrator of Pesticides at Department of Plant Protection, Faculty of Agriculture,
   Zagazig University from January 12,1998 until December 29, 2001.
- Assistant Researcher in Elgemeza research station, Agriculture research center, Doki, Giza from January 1, 1997 until January 11, 1998.
- Visiting Professor in Entomology Department and Cancer research Center Pesticide Biotechnology laboratory, UCDavis, California, USA, from October1, 2014 - February 1, 2015.
- Visiting scholar in the Pesticides Biotechnology Lab. Department of Entomology & Cancer Research Center UCDavis California, USA, from December 1, 2011 March 1, 2012.
- Research scholar in Missouri University Biological control of insects research laboratory, Agriculture research service, United States Department of Agriculture, from September 15 – December 15, 2010.
- Junior specialist in the Pesticides Biotechnology Lab. Department of Entomology & Cancer Research Center - UCDavis - California, USA from March 1, 2008 - May 31, 2008.
- Post-Doctoral Fellow in the Pesticides Biotechnology Lab. Department of Entomology & Cancer Research Center UCDavis California, USA from June 1, 2007 February 29, 2008.

## Training:

- Participation in the Entrepreneurship training Camp entitled "Design Thinking from Defining the Problem to Foreseeing the Future of Entrepreneurship" during the period from 28 to 30 December 2021 at the Development Projects Management Unit at Zagazig University
- Participate in the training course "Pesticides applicators" through delivering a lecture about "Common mistakes, safety and security in the application of public health pesticides and sterilization materials" organized by National Research Center on March 18, 2021.
- International training course "24<sup>th</sup> Alexander Hollaender Course: Genetic Toxicology of Environmental Pollutants, Novel Approaches for Hazard Assessment, Risk Assessment and Risk Management" 22 December 2019 held in ASRT.
- Training course about "Ethics consideration for animal care and use in scientific research and education" by the ZU-Faculty and leadership development center in

- cooperation with CU-IACUC during December 17 and 18, 2017.
- Training program about "TOT: training of trainers of working in pesticides traders field" by the Ministry of Agriculture and reclamation - Agriculture pesticides committee in May 8, 2017.
- Training course about "Crisis management and decision making for academic leaders" by the quality assurance and accreditation unit of Faculty of Agriculture, Zagazig University in March 1, 2017.
- Participate in a training course about "Strategic planning for higher education institutes" by national authority for quality assurance and accreditation in education from 23 to 24 August 2016.
- Training course about "Laboratory safety fundamentals training" from University of California at Davis California USA on October 25, 2014.
- Participation in several training courses for "Faculty and Leadership Development" in Zagazig University such as (Decency and ethics of the job- Strategic planning Quality Assurance and Accreditation preparation a research project competitive institutional and international research projects management of a research team –skills of scientific research preparing, writing and international publishing of scientific research papers communication skills in different education systems thinking skills time management and the work pressures lifelong (lifetime) learning curriculum design the use of technology in teaching exam systems and students evaluation).
- Training course about "*Risk analysis and technical training: Part II*" hosted by United States Department of Agriculture/Foreign Agriculture Service from 14 17 March 2010 in Four season Hotel, Cornish El-Nil, Cairo, Egypt.
- Training course about "*Using GC and HPLC in biochemistry*" from 8 to 10 April, 2009 in the medical technology center, Alexandria University, Egypt.
- Participating in the training workshop about "Applications of molecular biology techniques in immunology" held at the medical technology center, Alexandria University, Egypt from 25 to 28 March, 2009.
- Training course about "*Using quantitative-PCR in molecular biology*" in Hairing Hall UCDavis California USA in February 4, 2008.
- Training on "*Biosafety of using radioactive materials*" in Hoagland Hall UCDavis California USA in 26-6-2007.
- Training on the "Using geographical information system (GIS) and its applications" in the Faculty of Art Geography Department Zagazig University from June 23, 2005 to

- September 15, 2005.
- Participating in Egypt-Germany training workshop about "Plant genomic: from the gene to the product" from 8<sup>th</sup> to 13<sup>th</sup> April, 2002 in the Institute of Genetic Engineering and Biotechnology Minufia University, Egypt.

## Research projects:

## A) Research Projects as PI and member:

- **Member** in the Egyptian-American Universities Linkage Project, phase II, FRCU /USAID 263-0211, Grant # 93/04/16. "Minimizing the economic costs and the environmental/health effects of chemical pesticides in rural communities". (2000-2002).
- **Member** in the "Integrated Coastal Zone management of Port Said area, Egypt" Project: SMAPIII (cooperative with Europe commissariat) from April, 2006 until May, 2007.
- **Principle investigator** of the project titled "Molecular and biochemical diagnosis of enzymes associated in pesticide resistance of mosquitoes in Sharkia Governorate, Egypt" supported by Zagazig University (Grant # 27F8/P3; June, 2009-June, 2011).
- Member in an agreement for "control of public health pests in Zagazig university hospitals" from April 1<sup>st</sup>, 2012 until December 31, 2018.
- **Member** in a project (#785) for "Evaluating Acaricides efficacy against vegetable mites in Sarkia Governarate" from July 1<sup>st</sup>, 2012 until October, 30 2016.
- **Principle investigator** of the project titled "Identify new targets in the lepidopteran insect endocrine system for effective pest control" supported by Science and Technology Development Fund (STDF-STF) in cooperation with University of California at Davis (Grant # 6111; March, 2014 May, 2016).
- Principle investigator of the project titled "Food quality in Egypt: Screening for contamination with pesticides using Innovative VHH antibody-based assays and biosensors" supported in cooperation by Science and Technology Development Fund (STDF) and National Academy of Sciences (NAS) through US-Egypt cooperation project (Grant # 983; April, 2019 February, 2023).

#### B) Research Projects as a Peer Reviewer:

- Evaluation the proposal number "UREP18-170-4-003" submitted to The Qatar National Research Fund.
- Peer reviewer of national and international project proposals submitted to STDF (more than 15 projects evaluated until date).
- Peer reviewer of more than 10 national project proposals submitted to the post-graduate and research sector at Zagazig University, Egypt.

# Conferences, Seminars, Presentations, Lectures, and Invited talks:

- Oral presentation about "*Toxicological effects and chromosomal aberration of diazinon on albino rats, Rattus norvegicus*" in the 5<sup>th</sup> international conference on biological sciences at Tanta University, faculty of Science, from 5 to 6 November, 2008.
- Lecture about "*Techniques of molecular toxicology in agriculture*" for Syrian students on July 14, 2008 who were visit Zagazig University in July 2008.
- Seminar for Faculty of Agriculture members and students Zagazig University about "Studying the stability of expressed juvenile hormone esterase and biological effects of baculoviruses carrying wild type and mutated genes of JHE" on October 29, 2008.
- Seminar for Faculty of Agriculture members and students Zagazig University about "Biotechnology and pest control" on May 10, 2009.
- Special talk about "Juvenile hormone epoxide hydrolase (jheh)— a potent and novel recombinant biopesticide" in the International Symposium on Environmental Pollution, Ecology and Human Health held during 25 27 July 2009 at Sri Venkateswara University, Trupati, India.
- Lecture about "Genetically modified baculoviruses and pest control" in the Department of Sericulture, Sri Padmavati Mahila Visvavidyalayam (Women's University), Trupati, India on July 28, 2009.
- Special talk about "Egypt-India: Similarities & Differences" in the Department of Political Sciences and Public Administration at Sri Venkateswara University, Trupati, India on July 28, 2009.
- Lecture about "*Plant Protection and behind*" in University of Missouri, Colombia, USA in November 15, 2010.
- Presentation about "The potential of juvenile hormone esterase as a bio-insecticide: overview" 3<sup>rd</sup> Arab conference, 10-12 October, 2011, Library and Information Center, Cairo University.
- Presentation about "The role of α- and β-hydrolase fold enzymes as biopesticides in pest management" 3<sup>rd</sup> biopesticide international conference, St. Xavier's College, Palaymakottai, India, 28-30 November, 2011.
- Lecture about "Technology of using an insect enzyme and bioinformatics in pest control" to the community of Zagazig University in April 29, 2012.
- General lecture about "*Pesticides: Safe and effective use*" to Agricultural Engineers of Sharkia Province, Egypt in February 16, 2013.

- General lecture about "The role of agriculture extension in educating farmers with integrated pest management programs" to Agricultural Engineers of Sharkia Province, Egypt in February 23, 2013.
- General lecture about "Recent and alternative methods for agricultural pest control" to Agricultural community and Engineers of AlSalheia Provience at Sharkia Governorate, Egypt in October 12, 2013.
- General lecture about "*Food pollution and preservation*" to Agricultural community and Engineers of Ibrahimia Provience at Sharkia Governorate, Egypt in December 21, 2013.
- Invited lecture about "insect endocrine system as a potential target for pest control" for participants of "the 4<sup>th</sup> international conference of eco-friendly applied biological control of agricultural pests and phytopathogens" organized by Egyptian society of biological pest control on 20 October, 2015.
- Presentation about "Efficacy of Spodoptera littoralis nucleopolyhedrovirus on Spodoptera frugiperda and Spodoptera exigua: virulence, biological effects, and inhibition of juvenile hormone esterase". 4<sup>th</sup> international conference of eco-friendly applied biological control of agricultural pests and phytopathogens". Organized by Egyptian society of biological pest control during 19-22 October, 2015.
- Presentation about "Characterization and kinetics of juvenile hormone esterase from Spodoptera littoralis and S. frugiperda (Lepidoptera: Noctuidae)". 4<sup>th</sup> international conference of eco-friendly applied biological control of agricultural pests and phytopathogens". Organized by Egyptian society of biological pest control during 19-22 October, 2015.
- Invited lecture about "Biological aspects of pest control through targeting insect endocrine system" for participants in "International conference on computational, mathematical and biological modeling". Held in Sri Padmavati Mahila Visvavidylayam, Trupati, India on 25 March, 2016.
- Presentation about "Enhanced silk productivity through RNA interference technology of microRNAs targeting juvenile hormone hydrolase (JHEH) gene of silk worm Bombyx mori" in the "International conference on computational, mathematical and biological modeling". Held in Sri Padmavati Mahila Visvavidylayam, Trupati, India during 25-26 March, 2016.
- Lecture about "*Joint research opportunities between Egypt and India*" in Virology Department, Sri Venkateswara University, Trupati, India on 26 March, 2016.
- Lecture about "The tomato leaf miner, Tuta absoluta (Lepidoptera: Gelechiidae):

- *economic losses and integrated management*" in Institute of Frontier Technology, Regional Agriculture Research, Station of Acharya N.G. Ranga Agricultural University, Trupati, India on 27 March, 2016.
- U.S. Egypt Science and Technology symposium (Joint Fund) with a flash talk about "Food quality in Egypt: Detection using immunoassays and biosensors". November 5-7, 2018 at Cairo Marriott hotel, Zamalek, 11211.
- Organizing as a member in National Committee of Toxicology (NCT) for a symposium about "*Poisoning: Diagnosis and treatment*" held in Academy of Scientific Research and Technology (ASRT), December 26, 2018.
- Organizing as a member in National Committee of Toxicology (NCT) for a symposium about "Safe use of pesticides: protection of health, environment and economy" held in National Research Center (NRC), March 27, 2019.
- Lecture about "*Biotechnological applications in pest control*" in National Research Center (NRC), March 27, 2019.
- Achieving a publication in the national newspaper of Al-Ahram (Agricultural) for pesticides. Vol. 60; N. 725, 2019.
- Organizing and participating in the International Conference on Risk Assessment of Environmental Genotoxicants (21 – 23 December 2019) in Ramses Hotel and ASRT.
- Participating and delivering a plenary lecture in "the international conference on computational and bio-engineering" held in Sri Padmavati Mahila Visvavidyalayam (SPMVV), Trupati, India during 27-28 December 2019.
- Participating in the virtual workshop about "Integration of Technical and Vocational tracks in Higher Education Towards Employability and Economic Sustainability" organized by National Erasmus+ office in Egypt during August 31 and September 1, 2020.
- Organizing and participating in the webinar "*Petrochemical poisoning: prevention and treatment*" held virtually on November 11, 2020.
- Participating and delivering a plenary lecture virtually in "the 2nd international conference on computational and bio-engineering" held in Sri Padmavati Mahila Visvavidyalayam (SPMVV), Trupati, India during 4-5 December 2020.
- Participating in the 2<sup>nd</sup> international conference of the Egyptian Society of Food Safety "Food Safety and Health Strategies 2030" organized by Egyptian Society of Food Safety, held from 13-16 February 2020 in Sharm El Sheikh City-Egypt.
- Participating in the workshop about "Basic understanding and application of lean six

- sigma principles to streamline various scientific and management processes" held virtually from December 20, 2020 to January 3, 2021.
- Participate in the virtual workshop on "The principles and methods for the risk assessment of chemicals in food" organized by Department of Zoology, Potchefstroom Campus, North West University in support from the World Health Organization (WHO) through the WHO Chemical Risk Assessment Network and Toxicology Society of South Africa (TOXSA) during January 26-29, 2021.
- Organizing and participating in the webinar "*COVID-19 and Poisoning*" held virtually by National committee of toxicology (ASRT) on June 30, 2021.
- Organizing and participating in the webinar "Health and environmental risks of electronic waste and its safe disposal" held virtually by National committee of toxicology (ASRT) on July 28, 2021.
- Participating in the international conference about "Food industries and nutrition in the service of sustainable development" held in Samra Pay Hotel, Hurgada during 6-9 October, 2021.
- Participating in the webinar about "*The Digital University system: An Introduction to the Future*" organized by Association of Arab Universities on June 21, 2021.
- Participating in *the 7th annual conference of the Asian Council of Science Editors* held virtually on August 21, 2021.
- Participating in the 2nd webinar for Egyptian society of environmental mutagens titled "Examination of genetic modifiers in high risk cohorts: One approach to understand the genetics of complex traits" that held at 10<sup>th</sup> January 2022.
- Organizing a training workshop at Zagazig University for "Immunoassays of contamination with pesticides", held at the university project management unit and Plant Protection Department from 17-18 July, 2022.
- Organizing a symposium about "Public health pesticides: the safe use and protection from toxicity" as a part of the National committee of toxicology in ASRT, Egypt activities on September 28, 2022.
- Organizing a symposium about "Natural toxins between research and application" as a part of the National committee of toxicology in ASRT, Egypt activities on October 26, 2022.
- Organizing an international conference under theme "Environmental and Genotoxicants: Risks and Variability in Population Response" as a part of the National

- committee of toxicology in ASRT, Egypt activities from 19-20 December, 2022.
- Organizing a training workshop under theme "Basic understanding of risk assessment and its application in Egypt and Africa to establish safe levels of advisories and regulations in air, water, and food" as a part of the National committee of toxicology in ASRT, Egypt activities on 21 December, 2022.

#### **Publications:**

#### Posters:

- Mohamed-Bassem Ashour, Paul B. Tchounwou, Didair A. Ragheb, Bruce D. Hammock, **El-Sayed A. El-Sheikh**, Said Abol-Ela and Eladarosy A. Gomaa (2004). Subchronic toxicity of two entomobaculoviruses, methomoyl and their binary mixtures to white rats. First International Symposium *On Recent Advances in Environmental Health Research*. September 19-22, 2004, Marriott Hotel, Jackson, Mississippi, USA.
- Ashour, M.B.; Didair A. Ragheb; **E.A. El-Sheikh**; E.A. Gomaa; G. Kamita and B.D. Hammock (2006). Biosafety of recombinant and wild nuclear polyhedrosis viruses as bioinsecticides. Third International Symposium *On Recent Advances in Environmental Health Research*. September 19-22, 2006, Marriott Hotel, Jackson, Mississippi, USA.
- **El-Sayed A. El-Sheikh**, Shizuo G. Kamita and Bruce D. Hammock (2008). Juvenile hormone esterase: a promising enzyme for pest control. 42<sup>nd</sup> US-Japan workshop, UCDavis, California, USA. January 16-18, 2008.
- **El-Sayed A. El-Sheikh**, Shizuo G. Kamita, Bruce D. Hammock and Bassem A. Ashour (2010). Pharmacokinetic and stability of recombinant juvenile hormone esterase isolated from *Manduca sexta*. BioVision Alexandria 2010, from 11-15 April 2010 in Alexandria Library, Egypt.

#### Scientific publications:

- **El-Sheikh**, **E.A.E.** (2001). Risk assessment of a pest control agent. *M.Sc. Thesis*. Zagazig University.
- Paul B. Tchounwou, Bassem A. Ashour, Curtina Moreland-Young, Didair A. Ragheb, Ahmed A. Romeh, El-Adarosy Goma, El-Sayed El-Sheikh, Frances P. Lidell, Olurominiyi Ibitayo, and Jean-Claude Assad. (2002). Health risk assessment of pesticide usage in Menia El-Kamh Province Sharkia Governorate in Egypt. *International Journal of Molecular Sciences*. 3: 1082-1094.

- Ashour, M.B.; Didair A. Ragheb; E.A. Gomaa; **E.A. El-Sheikh**; G. Kamita and B.D. Hammock (2006). Comparative susceptibility of *Spodoptera littoralis* (Lepidoptera: Noctuidae) larvae to recombinant and wild nuclear polyhedrosis viruses. *Zagazig J. Agric. Res.*, 33(1): 119-134.
- **El-Sheikh**, **E.A.E.** (2006). Biosafety of a pest control biotechnology agent. *Ph.D. Thesis*. Zagazig University.
- Ashour, M.B.; Didair A. Ragheb; **E.A. El-Sheikh**; E.A. Gomaa; S.G. Kamita and B.D. Hammock (2007). Biosafety of recombinant and wild nucleopolyhedroviruses as bioinsecticides. *International J. Environ. Res. Public Health*, 4(2), 111-125.
- **El-Sayed A. El-Sheikh**, Ahmed A. Romeh, Mohamed A. Salama and Bassem A. Ashour (**2008**). Toxicological effects and chromosomal aberration of diazinon on albino rats, *Rattus norvegicus*. *The 5<sup>th</sup> international conference on biological sciences* at Tanta University, faculty of Science, from 5<sup>th</sup> to 6<sup>th</sup> November, 2008.
- Dadalla M. Mamatha, **El-Sheikh A. El-Sayed** and Lizy P. Sravanthi (**2009**). Juvenile hormone epoxide hydrolase (JHEH): a potent and novel recombinant biopesticide. International Symposium on Environmental Pollution, Ecology and Human Health. 25 27 July 2009 at Sri Venkateswara University, Trupati, India. Pp 109-113.
- **El-Sayed A. El-Sheikh** (2009). A genetically modified nucleopolyhedrovirus: effectiveness and *in vivo* expression in the black cutworm, *Agrotis ipsilon* (Lepidoptera: Noctuidae). *Egyptian J. Biol. Pest Cont.*, 19(2); 143-149.
- **El-Sheikh, E.A.** and M-B.A. Ashour (**2010**). Biodegradation technology for pesticide toxicity elimination In: Bioremediation technology-recent advances. H.M. Fulekar Editor. Springer; 1<sup>st</sup> Edition, pp 290.
- **El-Sheikh, E.A.** and M-B.A. Ashour (**2011**). The Susceptibility of *Spodoptera littoralis* (Lepidoptera: Noctuidae) larvae to recombinant baculoviruses expressing an insect-toxin and a juvenile hormone metabolic enzyme. *International Journal of Applied Agricultural Research*. 6(1):17–28.
- **El-Sheikh, E.A.** and M.M. Aamir (2011). Comparative effectiveness and field persistence of insect growth regulators on a field strain of the cotton leafworm, *Spodoptera littoralis*, Biosd (Lepidoptera: Noctuidae). *Crop Protection*, 30: 645-650.
- **El-Sheikh**, **E.A.**, S.G. Kamita, K. Vu and B.D. Hammock (**2011**). Improved insecticidal efficacy of a recombinant baculovirus expressing stabilized JH esterase from *Manduca sexta*. *Biological control*, 58: 354–361.
- **El-Sayed A. El-Sheikh** (2011). Larval susceptibility of *Culex pipiens* L. (Diptera: Culicidae) collected from different localities at sharking governorate to some insecticides. *Zagazig J. Agric. Res.*, Vol. 38 (3): 759-774.
- Mahmoud, M. G.; E.A. El-Sheikh, M.M. Aamir and M-B.A. Ashour (2011). Inducing toxic

- effects of sublethal doses of lambda-cyhalothrin on albino rats, *Rattus norvegicus* bork. *Zagazig J. Agric. Res.*, Vol. 38 (3): 775-792.
- **El-Sayed A. El-Sheikh**, Mary D. Mamatha, Didair A. Ragheb and Mohamed-Bassem A. Ashour (2011). The potential of juvenile hormone esterase as a bio-insecticide: overview. Egyptian J. Biol. Pest Cont., (21)1:103-110.
- **El-Sayed A. El-Sheikh**, Mary D. Mamatha (2012). The role of α- and β-hydrolase fold enzymes as biopesticides in pest management. *J. Biopesticide*. (5) 233 238.
- D.M. Mamatha, K.Sreedevi and **El-Sayed A. El-Sheikh** (2012). MicroRNAs of Insect Enzymes with insecticidal activity. IIHR symposium, Indian Institute of Horticultural Research, Hessaraghatta Lake P.O. BENGALURU-560089, from 25 28 April, 2012.
- Jonathan E. Breitenbach, **El-Sayed A. El-Sheikh**, Robert L. Harrison, Daniel L. Rowley, Michael E. Sparks, Dawn E. Gundersen-Rindal, and Holly J.R. Popham (**2013**). Determination and analysis of the genome sequence of *Spodoptera littoralis* multiple nucleopolyhedrovirus. *Virus Research*, 171: 194-208.
- **El-Sayed A. El-Sheikh**, M-Bassem Ashour, Mohamed Aamir, Mohamed Gamal **(2014)**. Monitoring the effect of insecticide selection on *Culex pipiens* (Diptera: Culicidae) larval susceptibility to malathion and lambda-Cyhalothrin . *Journal of Entomology*, 11(1): 14-24.
- **El-Sayed A. El-Sheikh** (2014). Virulence and pathogenicity of recombinant nucleopolyhedroviruses expressing a scorpion toxin and an insect enzyme on *Agrotis ipsilon* (Lepidoptera: Noctuidae) larvae. *African Entomology*, 22(3): 512-518.
- **El-Sayed A. El-Sheikh** (2015). Comparative toxicity and sublethal effects of emamectin benzoate, lufenuron and spinosad on *Spodoptera littoralis* Boisd. (Lepidoptera:Noctuidae). Crop Protection, 67: 228-234.
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