

Author Biography

Dr. Khalid Hussain Dhilloo

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Post-doc Fellow

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Introduction

After a decade of working on Insect's biology and Ecology, I have shifted my research direction to an interesting and a challenging topic "Insect Chemical Ecology" and "Insect Molecular Biology". My main goal is to understand how olfaction works at the molecular level and how it affects the pest status in an agricultural ecosystem. I am also eager to do some research on microbe-induced plant volatiles and their interaction with insects.

Disciplines

- Agricultural Science

Skills and expertise

- Agricultural Science, Insect Rearing, Integrated Pest Management, Insect Chemical Ecology, Semiochemicals, Insect Molecular Biology, Olfactory Pathways, Plant-mediated Pest Management, Host Plant Resistance, Insect Diversity, Tri-Trophic Interactions

Personal information:

Date of birth: April 06, 1988
Place of birth: Moro, Sindh-Pakistan
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Residential address:

House # C-124, Phase-II North
Qasimabad, District Hyderabad
Hyderabad (71000), Sindh-Pakistan

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Dhilloo Mohalla Dadu Road Moro,
District Naushahro Feroze, Sindh-Pakistan

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Academic Record

Ph.D.

2013-2016

Specialty: **Insect Molecular Biology**

Grade: Honorable

Thesis topic:

Cloning, Expression and RNAi of Pheromone Biosynthesis Activating Neuropeptide Receptor, a sex pheromone biosynthesis gene in the black cutworm, *Agrotis ipsilon*

**Institute of Plant Protection,
Graduate School of Chinese Academy of Agricultural Sciences,
Beijing-China**

M. Sc. (Honors)

2010-2012

Specialty: **Integrated Pest Management**

Grade: A

Thesis topic: **Monitoring of some insect pests of Brinjal plants through light traps as an effective Integrated Pest Management tool.**

Sindh Agriculture University, Tandojam, Sindh-Pakistan

B. Sc. (Honors) (Medalist)

2006-2010

CGPA: 3.77

Specialty: **Agricultural Entomology**

Grade: A-

Sindh Agriculture University, Tandojam, Sindh-Pakistan

Intermediate (H. Sc.)

2003-2005

Specialty: **Pre-Medical**

Grade: A

Board of Intermediate & Secondary Education (BISE), Sukkur, Sindh-Pakistan

Matriculation (S. Sc)

2001-2003

Specialty: **Pre-science**

Grade: A

Board of Intermediate & Secondary Education (BISE), Sukkur, Sindh-Pakistan

Professional Experience

- **Post-doc Fellow**, Institute of Plant Protection, Chinese Academy of Agricultural Sciences, Beijing, China 29-07-2023-
Continued

 - **Assistant Professor**, Department of Entomology, Sindh Agriculture University, Tandojam 16-02-2017-
Continued

 - **Lecturer**, Department of Entomology, Sindh Agriculture University, Tandojam 28-09-2016-
15-02-2017

 - **Research Associate** (HEC) Vegetable Project S.A.U, Tandojam 08-12-2012 to
07-12-2013

 - **Field Officer** (Mehran Sugar Mills LTD) Dist. Tando Allahyar 10-05-2011 to
06-12-2012

 - **Field Officer** (Bayer Crop Science) Dist. Banzirabad 03 months
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Honors/Distinctions

- *Ph.D. scholarship Award (FDP) Strengthening and Development of Sindh Agriculture University Tandojam by Higher Education Commission of Pakistan*
- *National Testing Service (NTS) Test Cleared for Foreign Scholarship award.*
- *Subject reviewer and member of some SCI and Non-SCI Journals*
- *First class academic career* throughout study period
- *Silver Medalist*, (B.Sc Hons.) S.A.U Tandojam
- *Merit Need Based Scholarship Program*, USAID (B.Sc Hons.) S.A.U Tandojam
- *Merit Need Based Scholarship Program*, USAID (M.Sc Hons.) S.A.U Tandojam.

Competences

Computer Knowledge

- Microsoft Office applications (Word, Excel, PowerPoint)
- Exploitation systems (Windows 2000/XP/Vista/7) \
- EndNote® (Thomas Reuters)
- Mendeley (Thomas Reuters)
- GraphPad Prism version 5.00 for Windows, GraphPad Software, San Diego California USA
- Statistical logistics (SPSS Statistics 18.0 software (SPSS Inc., Chicago, IL, USA), Statistix®)

Technical approach

- Molecular techniques
- RNA Extraction
- DNA extraction, purification etc.
- DNA amplification (PCR, RT-PCR q-RT-PCR,)
- Gel electrophoresis (DGGE)
- Gene cloning & sequencing
- RNA Interference (dsRNA and siRNA) synthesis and injection
- Chromatography (HPLC, GC-MS) and GC-EAG
- In-vivo and in-vitro pesticide resistance bioassays
- Insecticide efficacy/toxicity bioassays
- Mass rearing of invertebrates (many Lepidoptera & Coleopteran insect pests)

Linguistic Approach

Urdu/Sindh:	First languages
English:	Fluent
Chinese:	Normal

Scientific & Technical Formations

- Online Training Course on **Agricultural Pest and Diseases control technology For Pakistan** Organized by (NATESC), Ministry of Agriculture and Rural Affairs, P.R China.
- Two years training on **Rice crop and its insect pest's management** as IPM
- Three days international workshop training on **Experimental Design and Statistical Analysis in Agricultural Research** at Institute of Plant Protection
- Five days international workshop training on **Integrated Pest Management** Course for Graduate School of IPP-CAAS, Beijing-China-2015.
- On day training workshop on **HEC Plagiarism Policy and Effective Usage of Turnitin Services**.

Scientific Seminars/Visits

1. Seminar delivered at Institute of Plant Protection, Chinese Academy of Agricultural Science on "Integrated Pest Management tools used for the control of vegetable pests in Sindh Pakistan".
2. Seminar delivered at Institute of Plant Protection, Chinese Academy of Agricultural Science on "Pest Problems and their Environmentally safe control measures in Sindh-Pakistan"

Courses Teaching

1. Introductory Entomology for Undergraduate (FCPT)
2. Applied Entomology for Undergraduate (FCPD)
3. Introductory Biology for Undergraduate (FCPT)
4. Range and Forest Entomology for Undergraduate (FCPT)
5. Biological Control for Undergraduate (FCPT)
6. Insecticides and Public Health for Undergraduate (FCPT)
7. Agriculture and Environment Pollution for Undergraduate (FCPT)
8. Internship Writing Report and Presentation for Undergraduate (FCPT)
9. Insect Rearing Techniques for M.Sc (Entomology)
10. Insect Pathology for Ph.D. (Entomology)

Administrative Responsibilities

1. Faculty Coordinator for Undergraduate Students at Faculty of Crop Protection, SAU Tandojam.
2. Faculty Representative for Web and Email Designing, Computerization and Networking Section, for Faculty of Crop Protection, Sindh Agriculture University Tandojam.
3. Faculty Representative for Student-Teacher Entertainment Programs (STEP) at Faculty of Crop Protection, Sindh Agriculture University Tandojam.

Conferences/Symposia Participation

International

- Two days 1st International Conference on Plant Protection Sciences (ICPPS-2022), SAU. Tandojam.
- Three days Conference on Entomological Society of Beijing at Beijing Forestry University, 2015.
- Three days Conference on 36th Pakistan Congress of Zoology (International) (Feb 16-18, 2016).
- Three days conference on 2nd International Conference on Agriculture, Food & Animal Science Sindh Agriculture University Tandojam.
- ICGEB Workshop on Phenomes and Genomes–Workshop "International Symposium on Phenomes and Genome" 11 - 13 May, Shanghai, China.
- Two days conference on 3rd International Conference on Agriculture, Food & Animal Science Sindh Agriculture University Tandojam.
- Three days International Entomological Congress and One Exclusive Day on Current Scenario and Management Of Pink Bollworm.
- 37th Pakistan Congress of Zoology (International) February 28-March 2, 2017, Government College University, Faisalabad.
- Two days conference on 3rd International Conference on Agriculture, Food & Animal Science Sindh Agriculture University Tandojam from January 10-11, 2017.
- Three days International Symposium on Innovative Trends in Agricultural Sciences: Way Forward to Sustainable Development from November 23-25, 2017.
- 38th Pakistan Congress of Zoology (International) February 27-March 1, 2018, at University of Punjab Lahore.
- Three days international conference on Biological Control of Pests & Diseases: Progress and Prospects from July 09-11, 2018.

Master student Graduated under my Supervision

S. No.	Name of Student	Year	Research Title
01	Muhammad Uzair Khokhar Reg.No. 2K16-ET-43	2016	Effect of hybrid and conventional maize varieties on biology and morphometric of <i>Chilo partellus</i> (Swinhoe) (Lepidoptera: Pyralidae)
02	Shafqat Ali Qadri Reg.No. 2K16-ET-55	2016	Response of colored sticky traps to sucking insect pests of chickpea <i>Cicer arietinum</i> L.
03	Naveed Hussain Magsi Reg.No. 2K16-ET-46	2016	Screening of cabbage varieties for resistance against <i>Thrips tabaci</i> L. (Thysanoptera: Thripidae)
04	Yasir Ali Soomro Reg.No. 2K17-ET-56	2017	Effect of peppermint oil on various life stages of melon fruit flies <i>Bactrocera cucurbitae</i> (Coquillet) under lab condition
05	Himmat Ali Mangnejo Reg.No. 2K17-ET-17	2017	Effect of peppermint oil on the egg lay inhibition and different life stages of oriental fruit fly <i>Bactrocera dorsalis</i> (Handle) under lab condition
06	Muhammad Bashir Reg.No. 2K17-ET-30	2017	Management of yellow stem borer, <i>Scirpophaga incertulas</i> (walker) (Lepidoptera: Pyralidae) in rice crop using neem bio-products.
07	Muhammad Waqas Reg. No. 2K18-ET-20	2018	Bioefficacy of novel insecticides against <i>Scirpophaga incertulas</i> (walker) (Lepidoptera: Pyralidae).
08	Shahzad Ali Reg. No. 2K18-ET-27	2018	Assessment of bio pesticides against rice yellow stem borer <i>Scirpophaga incertulas</i> in field condition.
09	Habib Ur Rehman Reg. No. 2K18-ET-27	2018	Development and predatory performance of <i>Coccinella septempunctata</i> L. (Coccinellidae: Coleoptera) on aphid species
10	Ahmed Reg. No. 2K19-ET-05	2019	Phonological response of wheat varieties against wheat aphid.
11	Asad Ali Reg. No. 2K19-ET-10	2019	Effect of Lufenuron concentrations against maize stem borer (<i>Chilo partellus</i> Swinhoe) in field condition.
12	Sheeran Reg. No. 2K19-ET-34	2019	Effect of Pyriproxyfen concentrations against sucking insect pests on cotton in field condition.
13	Khalil-Ur- Rehman 2K20-ET-012	2020	Field evaluation of insect growth regulators against sucking insect pests of cotton.
14	Yousuf Khan 2K20-ET-023	2020	Field evaluation of insect growth regulators against <i>Helicoverpa armigera</i> in cotton field.
15	Shehryar 2K20-ET-033	2020	Monitoring of codling moth, <i>Cydia pomonella</i> (Lepidoptera: Tortricidae) using pheromone traps.
16	Ali Ahmed 2K21-ET-010	2020	Effect of Lufenuron and Pyriproxyfen on Fitness and Reproduction of maize stem borer, <i>Chilo Partellus</i> (Swinhoe) Lepidoptera: Crambidae
17	Kainat Shahid 2K21-ET-028	2020	Survival, development, and reproduction of maize stem borer, <i>Chilo Partellus</i> (Swinhoe) Lepidoptera: Crambidae on hybrid and conventional maize.

Research Projects

1. IPM Strategies for Controlling insect pests of vegetable crops in Sindh. Higher Education Commission (As Research Associate).
2. Viral Diseases of Chilli and their subsequent management by Sindh Higher Education Commission (As Co.P.I).

Research Publications

IN INTERNATIONAL AND NATIONAL JOURNALS:

Year 2024:

1. Wu, Hui, Zhuangzhi Cui, Xiaoqing Huang, **Khalid Hussain Dhilloo**, Fanfang Kong, Zhongyue Wang, and Yongqiang Liu. (2024). Spontaneous Color Preferences and Associative Learning in *Protaetia brevitarsis* (Coleoptera: Scarabaeidae). **Insects**. 15(10):780. Doi.org/10.3390/insects15100780. (SCI-Impact Factor: 2.7).
2. Xuan Song, Chang Liu, Chao-Qun Yi, Zi-Yi Tang, **Khalid Hussain Dhilloo**, Tian-Tao Zhang, Wen-Tao Liu, Yong-Jun Zhang. (2024). Functional characterization of prenyltransferases involved in de novo synthesis of isoprenoids in the leaf beetle *Monolepta hieroglyphica*. **International Journal of Biological Macromolecules**. 15;280(Pt 1):135688. Doi: 10.1016/j.ijbiomac.2024.135688. (SCI-Impact Factor: 7.7).
3. Ruijun Li, Xuan Song, Shuang Shan, **Khalid Hussain Dhilloo**, Shanning Wang, Zixuan Yin, Ziyun Lu, Adel Khashaveh, Yongjun Zhang. (2024). Female-Biased Odorant Receptor MmedOR48 in the Parasitoid *Microplitis mediator* Broadly Tunes to Plant Volatiles. **Journal of Agricultural and Food Chemistry**. 72, 31, 17617–17625. DOI: 10.1021/acs.jafc.4c02737. (SCI-Impact Factor: 5.7).
4. Aneeta Lashari, Bhai Khan Solangi, Abdul Waheed Solangi, Kaneez Fatima, Sajjad Hussain Rind, Muhammad Yousif Rahimoon, **Khalid Hussain Dhilloo**. (2024). Field evaluation of plant oil formulations as potential control measures against the cotton mealybug (*Phenacoccus solenopsis* Tinsley). **Plant Protection**, 08 (03): 375-383. DOI:10.33804/pp.008.03.5130. (HEC, Y-Category).
5. Shadab Kaka, Tahira Jabeen Ursani, Samina Malik, Noshaba Zaheed Khan, Muhammad Junaid Khilji, Sabina Shaikh, **Khalid Hussain Dhilloo**, Jawaid Ali Khokhar. (2024). Systematic Study of Family Pholcidae (Cellar Spiders) from the District Hyderabad, Sindh, Pakistan. **Journal of Applied Research in Plant Sciences**. Vol. 5(2), 214-218 DOI:10.38211/joarps.2024.05.249. (HEC, Y-Category).
6. Noshaba Zaheer Khan, Tahira Jabeen Ursani, Jawaid Ahmed Khokhar, Samina Malik, Muhammad Junaid Khilji, Shadab Kaka, **Khalid Hussain Dhilloo**, Sabina Shaikh. (2024). Prevalence of diabetic nephropathy amongst type 2 diabetic patients attending tertiary Hospital of Hyderabad, Sindh, Pakistan. **Pakistan Journal of Biotechnology**. Vol. 21(2), 332-338. DOI: 10.34016/pjbt.2024.21.02.869. (HEC, Y-Category).
7. Xuan Song, Chang Liu, **Khalid H. Dhilloo**, Chao-qun Yi, Tian-Tao Zhang, Yong-Jun Zhang. (2024). Functional characterization of a geranylgeranyl diphosphate synthase in the leaf beetle *Monolepta hieroglyphica*. **Archives of Insect Biochemistry and Physiology**. 115 (2): e22088. https://doi.org/10.1002/arch.22088. (SCI-Impact Factor: 1.5).

Year 2023:

1. Dong Teng, Weixia Jing, Beibei Lv, Xinzheng Huang, Danyang Zhao, Junfeng Kou, Xiaohe Liu, **Khalid Hussain Dhilloo**, Yongjun Zhang. (2023). Two jasmonic acid carboxyl methyltransferases in *Gossypium hirsutum* involved in MeJA biosynthesis may contribute to plant defense. **Frontiers in Plant Science**. DOI: 10.3389/fpls.2023.1249226. (Impact Factor: 5.6).

Year 2022:

1. Ruijun Li, Shuang Shan, Xuan Song, Adel Khashaveh, Shanning Wang, Zixuan Yin, Ziyun Lu, **Khalid Hussain Dhilloo**, Yongjun Zhang (2022). Plant volatile ligands for male-biased MmedOBP14 stimulate orientation behavior of the parasitoid wasp *Microplitis mediator*. **International Journal of Biological Macromolecules**. <https://doi.org/10.1016/j.ijbiomac.2022.11.149>. (SCI-Impact Factor: 8.025).
2. Shuang Shan, Xuan Song, Adel Khashaveh, Shan-Ning Wang, Zi-Yun Lu, **Khalid Hussain Dhilloo**, Rui-Jun Li, and Yong-Jun Zhang. (2022). A female-biased odorant receptor tuned to the lepidopteran sex pheromone in parasitoid *Microplitis mediator* guiding habitat of host insects. **Journal of Advanced Research**. <https://doi.org/10.1016/j.jare.2022.03.006>. (SCI-Impact Factor: 10.4).
3. Abdul Wahab Magsi, Agha Mushtaque Ahmed, Ali Zachi Abdul Qadir Alhilfi, **Khalid Hussain Dhilloo**, Fahad Nazir Khoso, Shahjahan Rajput, Din Muhammad Soomro, and Muhammad Akbar Lashari. (2022). Dual effects of Plant Materials Against Pulse Beetle, *Callosobruchus maculatus* F. (Chrysomelidae: Coleoptera) on Chickpea. **Pakistan Journal of Scientific and Industrial Research Series B: Biological Sciences**. DOI: 10.52763/PJSIR.BIOL.SCI.65.1.2022.11.17. (HEC, Y-Category).

Year 2021:

1. Sabir I. Khoso, Jamal-U-Ddin Hajano, Ali A. Lakho, Manzoor A. Abro, **Khalid H. Dhilloo**, Khadim H. Wagan, Fahad N. Khoso, Aftab R. Jarwar, Suman T. Qazi, and Syed Rizwan. (2021). Screening of okra varieties for resistance to okra yellow vein mosaic disease under field conditions. **International Journal of Phytopathology**. DOI: 10.33687/phytopath.010.01.3516. (HEC, X-Category).
2. Tanzeela-ul-Zahra Khaskheli, Lubna Bashir Rajput, Shafique Ahmed Memon, **Khalid Hussain Dhilloo**, Nafeesa Zahra Khaskheli, Qurat Ul Ain Bhatti and Arfan Ahmed Gilal. (2021). Repellent potential of medicinal oils against *Tribolium castaneum* (Herbst) under laboratory conditions. **Abasyn Journal of Life Sciences**. 4 (2): 7-15, DOI: 10.34091/AJLS.4.2.2. (HEC, Y-Category).

Year 2020:

1. Shuang Shan, Shan-Ning Wang, Xuan Song, Adel Khashaveh, Zi-Yun Lu, **Khalid Hussain Dhilloo**, Rui-Jun Li, Xi-Wu Gao, and Yong-Jun Zhang. (2020). Characterization and target gene analysis of microRNAs in the antennae of the parasitoid wasp *Microplitis mediator*. **Insect Science**. DOI 10.1111/1744-7917.12832. (SCI-Impact Factor: 2.791).
2. Shan-Ning Wang, Shuang Shan, Guo-Yue Yu, He Wang, **Khalid Hussain Dhilloo**, Adel Khashaveh, Fan Zhang · Yong-Jun Zhang. (2020). Identification of odorant-binding proteins and functional analysis of antenna-specific AplaOBP1 in the emerald ash borer, *Agrilus planipennis*. **Journal of Pest Science**. 93:853–865. <https://doi.org/10.1007/s10340-019-01188-4>. (SCI-Impact Factor: 4.647).
3. ZHANG Hong, HUANG Xin-zheng, JING Wei-xia, LIU Dan-feng, **Khalid Hussain DHILOO**, HAO Zhi-min, and ZHANG Yong-jun. (2020). Two farnesyl pyrophosphate synthases, GhFPS1–2, in *Gossypium hirsutum* are involved in the biosynthesis of farnesol to attract parasitoid wasps. **Journal of Integrative Agriculture**. 19(9): 2274–2285. [https://doi.org/10.1016/S2095-3119\(20\)63203-8](https://doi.org/10.1016/S2095-3119(20)63203-8) (SCI-Impact Factor: 1.984).

Year 2019:

1. Shuang Shan, Shan-Ning Wang, Xuan Song, Adel Khashaveh, Zi-Yun Lu, **Khalid Hussain Dhilloo**, Rui-Jun Li, Xi-Wu Gao, Yong-Jun Zhang. (2019). Antennal ionotropic receptors IR64a1 and IR64a2 of the parasitoid wasp *Microplitis mediator* (Hymenoptera: Braconidae) collaboratively perceive habitat and host cues. **Insect Biochemistry and Molecular Biology**. <https://doi.org/10.1016/j.ibmb.2019.103204>. (SCI-Impact Factor: 3.922).
2. Zibo Li, Yu Wei, Liang Sun, Xingkui An, **Khalid Hussain Dhilloo**, Qi Wang, Yong Xiao, Adel Khashaveh, Shaohua Gu, Yongjun Zhang. (2019). Mouthparts enriched odorant binding protein

AfasOBP11 plays a role in the gustatory perception of *Adelphocoris fasciaticollis*. **Journal of Insect Physiology**. <https://doi.org/10.1016/j.jinsphys.2019.103915>. (SCI-Impact Factor: 2.862).

3. Shuang Shan, Shan-Ning Wang, Xuan Song, Adel Khashaveh, Zi-Yun Lu, **Khalid Hussain Dhilloo**, Rui-Jun Li, Xi-Wu Gao, Yong-Jun Zhang. (2019). Molecular characterization and expression of sensory neuron membrane proteins in the parasitoid *Microplitis mediator* (Hymenoptera: Braconidae). **Insect Science**. 27(3):425-439. doi: 10.1111/1744-7917.12667. (SCI-Impact Factor: 2.710).
4. Muhammad Sabir Bhutto, Jamal-U-Ddin Hajano, Abdul Ghani Kandhro, Zubair Ahmed Nizamani, **Khalid Hussain Dhilloo**, Lemon Kumar, Khadim Hussain Wagan and Aftab Raza Jarwar. (2019). Prevalence, mechanical transmission, and impact of environmental conditions on cucumber mosaic disease in Sindh. **Pure and Applied Biology**. 8(2): 1051-1061. (HEC, Y-Category).

Year 2018:

1. Shan-Ning Wang, Shuang Shan, Jing-Tao Liu, Rui-Jun Li, Zi-Yun Lu, **Khalid Hussain Dhilloo**, Adel Khashaveh, Yong-Jun Zhang. (2018). Characterization of antennal chemosensilla and associated odorant binding as well as chemosensory proteins in the parasitoid wasp *Microplitis mediator* (Hymenoptera: Braconidae). **Scientific Reports**. DOI:10.1038/s41598-018-25996-3. (SCI-Impact Factor: 4.525).

Year 2017:

1. Kun Dong, Hong-Xia Duan, Jing-Tao Liu, Liang Sun, Shao-Hua Gu, Ruo-Nan Yang, **Khalid Hussain Dhilloo**, Xi-Wu Gao, Yong-Jun Zhang and Yu-Yuan Guo. (2017). Key site residues of pheromone binding protein 1 involved in interacting with sex pheromone components of *Helicoverpa armigera*. **Scientific Reports**. 7: 16859 | DOI:10.1038/s41598-017-17050-5. (SCI-Impact Factor: 4.525).
2. Kun Dong, Liang Sun, Jing-Tao Liu, Shao-Hua Gu, Jing-Jiang Zhou, Ruo-Nan Yang, **Khalid Hussain Dhilloo**, Xi-Wu Gao, Yu-Yuan Guo, Yong-Jun Zhang. (2017) RNAi-Induced Electrophysiological and Behavioral Changes reveal two Pheromone Binding Proteins of *Helicoverpa armigera* Involved in the Perception of the Main Sex Pheromone Component Z11-16:Ald. **Journal of Chemical Ecology**. DOI 10.1007/s10886-016-0816-6. (SCI-Impact Factor: 3.151).

Year 2016:

1. Yongqiang Liu, Fuqian Yang, Hongtie Pu, Junping Su, Zongjiang Liu, **Khalid Hussain Dhilloo**, Zhongyue Wang. (2016) The Sublethal Effects of β -Ecdysterone, a Highly Active Compound from *Achyranthes bidentata* Blume, on Grape Phylloxera, *Daktulosphaira vitifoliae* Fitch. **PLoS ONE** 11(11): e0165860. doi:10.1371/journal.pone. (SCI-Impact Factor: 3.54).
2. Zhuoya Zhao, Yunhe Li, Yutao Xiao, Abid Ali, **Khalid Hussain Dhilloo**, Wenbo Chen and Kongming Wu. (2016). Distribution and metabolism of Bt-Cry1Ac toxin in tissues and organs of the cotton bollworm, *Helicoverpa armigera*. **Toxins**. 8, 212; doi: 10.3390/toxins8070212 (SCI-Impact Factor: 3.942).
3. Dandan Zhang, Yutao Xiao, **Khalid Hussain Dhilloo**, Mario Soberon, Alejandra Bravo, and Kongming Wu. (2016). Molecular Cloning, Expression, and Identification of 5 Bre Genes Involved in Glycosphingo lipids Synthesis in *Helicoverpa armigera* (Lepidoptera: Noctuidae). **Journal of Economic Entomology**. doi: 10.1093/jee/tow040 (SCI-Impact Factor: 1.506).
4. Huan-Huan Cui, Shao-Hua Gu, Xiao-Qiang Zhu, Yu Wei, Hang-Wei Liu, **Khalid Hussain Dhilloo**, Yu-Yuan Guo, Yong-Jun Zhang. (2016) Odorant-binding and chemosensory proteins identified in the antennal transcriptome of *Adelphocoris suturalis* Jakovlev. **Comparative Biochemistry and Physiology - Part D: Genomics and Proteomics**. S1744-117X (16) 30018-1. doi: 10.1016/j.cbd.2016.03.001 (SCI-Impact Factor: 2.301).
5. Wang, S-N., Peng, Y., Lu, Z-Y., **Dhilloo, K.H.**, Zheng, Y., Shan, S., Li, R-J., Zhang, Y.J., Guo, Y-Y. (2016). Cloning and expression of ionotropic receptors in the parasitoid wasp *Microplitis mediator* (Hymenoptera: Braconidae). **Journal of Insect Physiology**. doi: 10.1016/j.jinsphys.2016.05.002. (SCI-Impact Factor: 2.470).

Year 2015:

1. Shan-Ning Wang, Yong Peng, Zi-Yun Lu, **Khalid Hussain Dhilloo**, Shao-Hua Gu, Rui-Jun Li, Jing-Jiang Zhou, Yong-Jun Zhang, Yu-Yuan Guo. (2015). Identification and Expression Analysis of Putative Chemosensory Receptor Genes in *Microplitis mediator* by Antennal Transcriptome Screening. **International Journal of Biological Sciences**. 11(7): 737-751. doi: 10.7150/ijbs.11786. (SCI-Impact Factor: 4.509).
2. Hai-Bin Yuan, Yu-Xiao Ding, Shao-Hua Gu, Liang Sun, Xiao-Qiang Zhu, Hang-Wei Liu, **Khalid Hussain Dhilloo**, Yong-Jun Zhang, Yu-Yuan Guo. (2015). Molecular Characterization and Expression Profiling of Odorant-Binding Proteins in *Apolygus lucorum*. **PLOS-ONE**. 10(10): e0140562. doi:10.1371/journal.pone. (SCI-Impact Factor: 3.23).
3. Yongqiang Liu, Zhongyue Wang, Junping Su, Weiwei Liu, **Khalid Hussain Dhilloo**, Yuyuan Guo. (2015). The Efficacy of Chinese Medicinal Herbs towards Grape Phylloxera (*Daktulosphaira vitifoliae* Fitch) (Hemiptera, Phylloxeridae). **PLOS-ONE**. 10(7): e0128038. doi:10.1371/journal.pone.0128038. (SCI-Impact Factor: 3.23).

Proceedings:

1. **Khalid Hussain Dhilloo**, Shan-Ning Wang, Ruonan Yang, Kun Dong, Shao-Hua Gu, Muhammad, Yaseen, Tahira Jabeen Ursani, Samina Malik and Yong-Jun Zhang. (2018). Knockdown of Pheromone Biosynthesis Activating Neuropeptide Receptor in *Agrotis ipsilon* (HUFNAGEL) (Lepidoptera: Noctuidae). Proc. Pakistan Congr. Zool. **Pakistan Journal of Zoology**. 18: 228p. (Impact Factor: 0.687).
2. **Khalid Hussain Dhilloo**, Yong-Jun Zhang, Tahira Jabeen Ursani, Tajwar Sultana Syed and Maqsood Anwar Rustamani. (2017). Cloning, relative expression and mating effects of PBANR gene in *Agrotis ipsilon* (HUFNAGEL) (Lepidoptera: Noctuidae) adults by using qPCR. Proc. Pakistan Congr. Zool. **Pakistan Journal of Zoology**. 17: 58p. (Impact Factor: 0.687).

References

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