

BRIEF CURRICULUM VITA OF

Dr. Zain UL ABDIN (Ph.D)

Assistant Professor, Department of Entomology, University of Agriculture,

Faisalabad, Pakistan

E.mail. zainunibas@gmail.com

An Entomologist by education with over 10 years of experience in teaching, research, extension and community service with overall aim to improve the socio economic conditions of the Pakistani farmers by improving yield/production of their agricultural crops through sustainable plant protection strategies. Currently working as an Assistant Professor in the Department of Entomology, University of Agriculture, Faisalabad, Pakistan and Project Leader of an international competitive research grant on the “Development of natural substitutes of synthetic chemical insecticides for insect control” funded by IFS (International foundation of Science, Sweden).



Previously completed HEC (Higher education commission, Govt.of Pakistan) project on “Insecticidal genes from parasitic hymenoptera” Actively engaged in R&D and capacity building activities, with special focus on non-chemical control of insects for improving the food security and food safety by reducing toxic chemical residues in food supply chain to human beings. Apart from academics, made significant contribution in several projects mentioned above. Previously did PhD from University of Basilicata, Potenza, Italy by winning fellowship of Italian Ministry of Foreign Affairs. Also received Gold and Silver Medals awarded by Govt. of Pakistan for academic distinction in Bachelor and Master of science by securing CGPA: 4.00/4.00 in both degrees and University Merit scholarship holder from 1996-98, presented R&D work at several significant international conferences, including in USA, UK, Poland and Italy. Participated in a number of professional training/workshops. I have the honour to be a fellow of Royal Entomological Society, UK and member of Entomological Society of America and recently presented our work in ICE 2016 (International Congress of Entomology) September 25-30, 2016. Orlando (Florida) USA.

PERSONAL INFORMATION:

Name	:	Dr. Zain UL ABDIN
Post held	:	Assistant Professor http://www.uaf.edu.pk/EmployeeDetail.aspx?userid=227
Date of birth & Place of Birth	:	August 19, 1975 Okara (Punjab)
Mailing address /		
Corresponding address	:	Department of Entomology University of Agriculture, 38040 Faisalabad, Pakistan.
Tel.off.	:	0092 (0) 419200161-70 Ext.2906
Cell	:	0092(0)3327404758
E-mail	:	zainunibas@gmail.com

EDUCATION:

Degree	University / Board	Year	C.G.P.A.	Marks	% Age	Division/ Position
Ph.D European Ph.D course “Insect Science and Biotechnology”	University of Basilicata, Potenza, ITALY	2009	Title of Ph.D Thesis “GENES EXPRESSED IN THE VENOM GLAND OF THE APHID PARASITOID APHIDIUS ERVI (HALIDAY) (HYMENOPTERA, BRACONIDAE)”			
M.Sc. (Hons) Agricultural Entomology	University of Agriculture, Faisalabad, Pakistan	2002	4.00/4.00	849/940	90.31%	1 st A
B.Sc. (Hons) Agricultural Entomology	University of Agriculture, Faisalabad, Pakistan	2000	4.00/4.00	3517/4040	87.05 %	1 st A

Professional Honours & Distinctions:

- **GOLD MEDAL & 1st Position** in B.Sc. (Hons) Agricultural Entomology by securing C.G.P.A: **4.00/4.00 & 87.05 %** Marks, awarded by the honourable Governor Punjab / Worthy Chancellor of the University of Agriculture, Faisalabad, in 12th Convocation, January 24, 2004.
- **SILVER MEDAL & 1st Position** in M.Sc (Hons) Agricultural Entomology by securing C.G.P.A: **4.00 /4.00 & 90.31 %** Marks, awarded by the honourable Governor Punjab/ Worthy Chancellor of the University of Agriculture, Faisalabad, in 14th convocation, March 28, 2005.
- **Merit Scholarship holder** in B.Sc (Hons) Agriculture from 1996 to 1998, awarded by the University of Agriculture, Faisalabad.

PROFESSIONAL EXPERIENCE:

Total Experience: Teaching & Research: ≥ 13 Years

Organization	Designation	From	To	Duration	BPS (Pay scale)	Brief job description
University of Agriculture, Faisalabad	Assistant Professor (TTS)	April 16, 2009	To date		19	Teaching & Research
University of Agriculture, Faisalabad	Lecturer	April 12, 2003	April 15, 2009	6 years & 3 days	18	Teaching & Research

Teaching:

The following undergraduate and postgraduate courses offered by the Department of Entomology are assigned to me for teaching

Undergraduate Courses				
Sr. No.	Course No.	Course Title	Credit hours	Degree Class
	ENT-102	Introductory Agric. Entomology	4(2-2)	B. Sc(Hons) Agriculture
i.	ENT-302	Insect Physiology	3(2-1)	B.Sc (Hons) Agri. Entomology
ii.	Ent-303	Principles of Insect Taxonomy	4(3-1)	B.Sc (Hons) Agri. Entomology
iii.	Ent-311	Vertebrate Pests and Their Management	3(2-1)	B.Sc (Hons) Agri. Entomology

iv.	Ent-316	Introduction to Insect Molecular Genetics	2(1-1)	Elective undergrad.
v.	Ent-401	Entomology-I	3(2-1)	B.Sc (Hons) Agri. Entomology
vi.	Ent-413	Pest Management and Phytosanitary Measures	3(2-1)	B.Sc (Hons) Agri. Entomology
Post Graduate Courses				
i.	ENT-701	Research Methods in Entomology	3 (2-1)	M.Sc (Hons.) & PhD
ii.	ENT-708	Insect Molecular Biology	(1-1)	M.Sc (Hons.) & PhD
iii.	ENT-704	Insect Biochemistry	3(2-1)	M.Sc (Hons.) & PhD
iv.	ENT-719	Special Problem	1(1-0)	M.Sc (Hons.) & PhD
v.	ENT-720	Seminar	1(1-0)	M.Sc (Hons.) & PhD

Student Supervision:

	Completed Post graduate students		Ongoing Post graduate students	
Role as	M.Sc./ M.Sc. (Hons.) / M.Phil	Ph. D	M.Sc./ M.Sc. (Hons.) / M.Phil	Ph.D
As major Supervisor	25	02	11	04 Ph.D students: 01- Thesis submitted 03- in progress
As member of supervisory committee	15		20	02

Scholarly Publications: There is a long list of publications and some of representative and the most recent Research articles published in peer reviewed Journals are presented below

1. Atif Manzoor , **Zain UlAbdin***, Bruce A. Webb, Muhammad Jalal Arif , Amer Jamil, **2016**. De novo sequencing and transcriptome analysis of female venom glands of ectoparasitoid Bracon hebetor (Say.) (Hymenoptera: Braconidae) Comparative biochemistry and Physiology, Part D. 20, 101-110. <http://dx.doi.org/10.1016/j.cbd.2016.08.002>
2. Hoor Shaina, **Zain UlAbdin ***, Bruce A. Webb , Muhammad Jalal Arif , Amer Jamil, **2016**. De novo sequencing and transcriptome analysis of venom glands of endoparasitoid Aenasius arizonensis (Girault) (=Aenasius bambawalei Hayat) (Hymenoptera, Encyrtidae). Toxicon 121, 134-144. <http://dx.doi.org/10.1016/j.toxicon.2016.08.022>
3. Muhammad Shahid Iqbal, **Zain ul Abdin***, Muhammad Arshad, Saqi Kosar Abbas , Muhammad Tahir, Amer Jamil and Atif Manzoor, **2016**. The Role of Parasitoid Age on the Fecundity and Sex Ratio of the Parasitoid *Aenasius bambawalei* (Hayat) (Hymenoptera:Encyrtidae). Pakistan J. Zool., vol.48(1), pp 67-72. [http://www.zsp.com.pk/pdf48/67-72%20\(8\)%20QPJZ-0128%20-2015%20%2010.9.2015%20\(Final\).pdf](http://www.zsp.com.pk/pdf48/67-72%20(8)%20QPJZ-0128%20-2015%20%2010.9.2015%20(Final).pdf)
4. Muhammad Javid Iqbal, Yasir Maqsood, **Zain Ul Abdin**, Atif Manzoor, Muhammad Hassan, Amer Jamil, **2016**. SSR Markers Associated with Proline in Drought Tolerant Wheat Germplasm. Appl Biochem Biotechnol., 178(5):1042-52. PMID:26637362
DOI: [10.1007/s12010-015-1927-1](https://doi.org/10.1007/s12010-015-1927-1)

5. Maryam Anwar, **Zain ul Abdin***, Saqi Kosar Abbas, Muhammad Tahir, Fiaz Hussain and Atif Manzoor, 2016. Effect of Cold Storage on the Survival, Sex Ratio and Longevity of Ectoparasitoid, *Bracon hebetor* (Say.) (Hymenoptera: Braconidae). Pakistan J. Zool., Vol.48 (6) pp 1775-1780.
[http://zsp.com.pk/pdf48/1775-1780%20\(23\)%20QPJZ-0498-2015%209-8-16.pdf](http://zsp.com.pk/pdf48/1775-1780%20(23)%20QPJZ-0498-2015%209-8-16.pdf)
6. Anam Jamil, **Zain ul Abdin*** Muhammad Arshad, Patrizia Falabella, Saqi Kosar Abbas, Muhammad Tahir, Amer Jamil, Atif Manzoor and Hoor Shaina, 2015. Multiple Effects of Host Density on Egg Density and the Sex Ratio of Progeny of *Bracon hebetor* (Say.) (Hymenoptera: Braconidae). Pakistan J. Zool., vol. 47(2), pp. 455-460
[http://zsp.com.pk/pdf47/455-460%20\(20\)%20PJZ-1962-14%2028-2-15%20Corrected.pdf](http://zsp.com.pk/pdf47/455-460%20(20)%20PJZ-1962-14%2028-2-15%20Corrected.pdf)
7. N. Yasmin, **Z. Ulabdin**, M. Shahid, M.A. Sheikh, A. Manzoor and A. Jamil, 2015. Biosorption Characteristics and Novel Antifungal Activity of *Abrus precatorius* Seed Extract. Asian J. Chem. 27(4): 1388-1390. DOI:10.14233/ajchem.2015.18002
8. Muhammad Arshad, **Zain-ul-Abdin**, Muhammad Dildar Gogi, Muhammad Jalal Arif and Rashad Rasool Khan, 2015. Seasonal Pattern of Infestation by Spotted Bollworm, *Earias insulana* (Boisd.) and Pink Bollworm, *Pectinophora gossypiella* (Saund.) in Field Plots of Transgenic Bt and non-Bt Cottons. Pakistan J. Zool., vol. 47(1), pp. 177-186, 2015
[http://zsp.com.pk/pdf47/177-186%20\(24\)%20PJZ-2050-14%2011-12-14%20Corrected%20paper%20for%20PJZ.pdf](http://zsp.com.pk/pdf47/177-186%20(24)%20PJZ-2050-14%2011-12-14%20Corrected%20paper%20for%20PJZ.pdf)
9. Saqi Kosar Abbas, **Zain ul Abdin**, Muhammad Jalal Arif1 & Amer Jamil, 2014. Functional analysis of the venom of mealybug parasitoid *Aenasius bambawalei* (Hymenoptera: Encyrtidae). Biologia, Section Zoology, 69/8: 1046-1050. DOI: 10.2478/s11756-014-0402-8
10. Raheela Jabeen & Ghulam Mustafa, **Zain ul Abdin**, M. Javid Iqbal and Amer Jamil, 2014. Expression Profiling of Bioactive Genes from *Moringa oleifera*. Appl Biochem Biotechnol. DOI 10.1007/s12010-014-1122-9. ISSN 0273-2289. 174(2):657-66.
<http://www.ncbi.nlm.nih.gov/pubmed/25086925>

Abstracts published in National and International conferences/symposia

Oral presentations:

1. **Zain ul Abdin***, Hoor Shaina, Saqi Kosar Abbas and Atif Manzoor, 2016. Molecular and physiological studies of the host regulation factor of endoparasitoid *Aenasius bambawalei* Hayat (Hymenoptera: Encyrtidae). XXV ICE 2016 (International Congress of Entomology) September 25-30, 2016. Orlando, Florida, **USA**
2. **Zain ul Abdin** * and Hoor Shaina, 2016. Transcriptome analysis of parasitic hymenoptera: A Novel approach for the development of innovative plant protection strategies. Recent advances and challenges in Molecular Biology, Biochemistry and Biotechnology". August 25-28, 2016, COMSAT, Abbottabad, **Pakistan**
3. **Zain ul Abdin**, 2016. Biotechnology based sustainable insect control strategies. International Conference of Biochemistry, Biotechnology and Biomaterials (ICBBB-2016). February 22-24, 2016. PP.113 Department of biochemistry, University of Agriculture, Faisalabad, **Pakistan (Key note lecture)**
4. **Zain ul Abdin** *, Amer Jamil, M. Jalal Arif, Hoor Shaina 2012. Functional analysis of the venom of mealybug parasitoid *Aenasius bambawalei* Hayat (Hymenoptera: Encyrtidae) in Ento '12, Res National Science meeting, July 18-20, 2012 Anglia Ruskin University, **UK**

5. **Zain ul Abidin, et al., 2011.** Host regulation by mealybug parasitoid *Aenasius bambawalei* Hayat (Encyrtidae: Hymenoptera). VIIth International conference on Arthropods: Chemical, Physiological, Biotechnological and Environmental aspects. Stefan Kopeć Memorial Conference, September 18 -23, 2011. PP.17 Białka Tatrzanska, **Poland**

Participation in symposia, workshops, seminars etc.

1. Completed a COMSTECH-FCC joint international workshop “**Genomics & Genome Editing**”. May 24-27, 2016. Forman Christian College, Lahore, Pakistan
2. Completed a 5 days training workshop 4th national Training course on “Bacterial identification and **Metagenomics**” March 16-20, **2015, NIBGE**, Faisalabad, Pakistan
3. Completed a 10 days training workshop “**Biochemical and Molecular Techniques in Plant Breeding**” October, -6-16, **2015, NIAB**, Faisalabad, Pakistan
4. Completed a training programme “International Workshop on “**Bioinformatics: Ensembl Database Mining and Whole Genome Sequencing Analyses**” December 16-18, **2014**, COMSTECH Islamabad, Pakistan
5. Attended a workshop/training course “ASEAN: Science and Technology Park” 30.08.2013 to 13.09.2013 at **Beijing, China**, under travel grant awarded by COMSATS Headquarters, Islamabad
6. Participated in a symposium on “Dengue Fever: Virology and vector control” held from 31st January-1st February, **2013** at National institute for Biotechnology and genetic engineering (NIBGE) Faisalabad
7. Participated in three days’ workshop on “Emerging Superbugs-Standardizing Antimicrobial Susceptibility Testing, Surveillance and Lab Biosafety Hands-On Workshop (February 25-27, **2013**) held at Agha Khan University Karachi, Pakistan

Other Scholarly Activities:

Fellowships/Memberships of professional societies:

- i. **Fellow of Royal Entomological Society (UK)** (Fellowship No. 3233)
- ii. **Member of Entomological Society of America (USA)** (Membership# 76772)
- iii. Member of International organization for Biological control (IOBC)
- iv. Pakistan Entomological Society (*life time member*) and Treasurer
- v. Member Pakistan Biological Safety association (Membership No.341)
- vi. Fellow of Common Wealth Charles Wallace Trust, British Council, UK

New Courses Developed:

Two new courses were added to the list of Entomology courses offered for B.Sc (Hons) Agriculture and M.Sc (Hons) & PhD degree classes that were developed by me.

- ENT-316) 2(1-1) “Introduction to Insect Molecular Genetics” (under grade)
- (ENT-708) 2(1-1) “Insect Molecular Biology (post grade)

Advisory, Administrative and Community Services etc.

There is a long list but some of them are presented below

- (i) **Member of the Senate of the University** (w.e.f. 11.03.2015, Endst.No. Coord/PB/8-83/1940-2040)
- (ii) **Tutor:** Acting as tutor for Tutorial Group (**Shabbier Shaheed- 2**), this Tutorial group comprising 50 students

(iii) **Hostel Superintendent:** Serving as superintendent Boys Residential hostel “Liaqat Hall” (No. SR-17.10.2012)

(iv) **Establishment of Collaboration with University of Kentucky, USA:**

Developed collaboration with Dr. Bruce A. Webb, Agricultural Biotechnology, College of Agriculture, Entomology Department, University of Kentucky, USA. to perform research in the area of Insect Biotechnology/Molecular Biology. Further, University of Kentucky is also our research partner and we have submitted a joint Project under PAK-US science and Technology cooperation programme and USPCAS-AFS, in addition to that our Ph.D students spent 6 months under HEC (IRSIP) training programme.

(v) Established a lab. “Insect Molecular Biology Lab.” In the Deptt. of Entomology, UAF from the funds pf Research grants

Competitive Research Grants

1. Completed: 03 Research project were completed as P.I and one project as Co-PI

	Funding agency	Title	Worth	Duration	status	Role as
1.	HEC (Higher education commission)	Development of natural substitutes of synthetic chemical insecticides for insect control derived from the toxic peptides coded by naturally occurring virulent genes in parasitic hymenoptera	Rs.3.099,106/ Millions	3-years	Completed	P.I
2.	PSF (Pakistan Science Foundation)	Parasitoid wasps as a source of novel insecticidal molecules	Rs.1.931,350 / Million	3-Years	Completed	P.I
3.	IFS (International Foundation of Science) SWEDEN	Development of environmentally benign novel natural bioinsecticides for effective insect control derived from the naturally occurring toxic genes in the female secretions of insect parasitoids	11750 USD	2-Years	completed	P. I
4.	HEC	Genetic diversity among sap feeding insects against gene encoding sheath protein	PAK.Rs.0.495 Million	12 months	Completed	Co. P.I

2. Ongoing: Currently, 01 project is running as P.I

	Funding agency	Title	Worth	Duration	status	Role as
1	HEC (Higher education commission, Govt. of Pakistan)	Novel non-venom insecticidal genes and peptides of Parasitic origin for sustainable insect control applications	Rs. 5.024493 Million	3-years	In progress	P. I

Foreign academic visits:

S.No	Country	Duration	Purpose of activity
1.	USA	September 22 to October 15, 2016	Oral presentation of Research article in International Congress of Entomology (ICE 2016 XXV) September 25-30, Orlando, Florida, USA. & Academic visit of Department of Entomology, University of Arizona, USA.
2.	China	August 30, 2013 September 13, 2013	Attended a training workshop “ASEAN: Science and Technology Park”
3.	UK	January 24, 2012-- April 22-2012	Visited School of Biology of The University of Nottingham and University of St. Andrews, Scotland, UK under Common Wealth Charles Wallace Visiting fellowship, British Council, Pakistan
		JULY 18-20, 2012	For presenting research article in “Ento ’12, Res National Science Meeting, Anglia Ruskin University, Cambridge, UK
4.	Poland	September 18 -23, 2011	For presenting a research article in VII th International conference on Arthropods: Chemical, Physiological, Biotechnological and Environmental aspects. Poland, travel grant provided by HEC
5.	Italy	November 27, 2005- April 30, 2009	For Ph.D studies under the fellowship of Italian Ministry of Foreign affairs
6.	Republic of South Africa	June 19, 2007- July 18, 2007	Attending a training workshop “Theoretical and Practical Course on Proteomics and Protein Bioinformatics” University of Limpopo, South Africa