# **CURRICULUM VITAE**

Name: Sadia Maalik

Father's Name: Muhammad Maalik

**Experience:** 10 years 11 months post PhD experience

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# **Courses Taught**

- 1. Introduction to Entomology
- 2. Economic entomology and pest control
- 3. Wildlife
- 4. Advances in entomology
- 5. Wildlife and Biodiversity
- 6. Fisheries
- 7. Economic Zoology
- 8. Ecology
- 9. Advances in entomology
- 10. Environmental issues

#### **QUALIFICATION:**

Degree	Institute/Universities	Division
		/CGPA
PhD (Zoolgy) 2013	University of Agriculture, Faisalabad	4/4
M.Phil (Zoology) 2009	University of Agriculture, Faisalabad	3.89/4
M.Sc (Zoology) 2006	University of Agriculture, Faisalabad	3.79/4
B.Sc(Chem, Zool, Botany) 2004	University of Punjab, Lahore	2 <sup>nd</sup> Div.
Intermediate F. Sc (Pre-medical)	Board of Intermediate and Secondary	1 <sup>st</sup> Div.
2001	Education Gujranwala	
Matriculation, 1999	Board of Intermediate and Secondary	1 <sup>st</sup> Div.
	Education Gujranwala	

# **RESEARCH ACTIVITIES**

- 1) "Seasonal variations and movement patterns of house mouse *Mus musculus* in wheat sugarcane based agro-ecosystem of Faisalabad" (M.sc Thesis)
- 2) "Feeding links of various arthropods occurring on vegetables" (M.phil Thesis)
- 3) "Relative abundance and role of braconid larval parasitoids in containing lepidopteran populations in district Faisalabad" (PhD Thesis)

# **HONOURS AND AWARDS**

- o Indigenous fellowship for M.Phil leading to PhD from HEC.
- Member of Selection Board (As Subject Experts) for Lecturers and Associate Lecturers (UOG Narowal Campus).
- o Viva Examiner for M. Sc and M.Phil thesis examination UAF and USKT.
- o HEC Approved Supervisor

# **PROJECTS**

 Study of eco-biology of braconid larval parasitoids and their role in containing lepidopteran populations in selected agro-ecosystems of Punjab, Pakistan. (NRPU: HEC completed)

# **RESEARCH PUBLICATIONS**

Sr#	Authors	Title of Article	Name of Journal (With Issue, Volume and Page number, if online add DOI)
01	Sadia Maalik*, Sajida Mushtaq, Moazama Batool, Naheed Bano, Ayesha Hafeez	Diversity and relative abundance of Braconid(Hymenoptera) among some selected crops of district Faisalabad, Pakistan	Biology and biotechnology Volume Number 9   Issue Number 1   Year 2024  Page Number 13
02	Sadia Maalik*, Sajida Mushtaq, Quart ul Ain, Moazama Batool,	Life table analysis and extent of damage caused by spodoptera exigua (noctuidae: lepidoptera), a	Online https://doi.org/10.33865/wjb.00 9.01.1125  Journal of Zoo Biology, 07 (01) 2024. 35-41  DOI: 10.33687/zoobiol.007.01.51
	Naheed Bano, Ayesha Hafeez	serious pest	03
03	K. Abid, N. Rana, W. Majeed*, N.J. Alotaibi, H.A. Khan, S. Manzoor, S. Maalik, R. Kiran and M.Z.E. Arif1	Diversity and abundance of insects in two different districts of Punjab, Pakistan	Journal of Animal & Plant Sciences, 34(2): 2024, Page: 435-444 https://doi.org/10.36899/J APS.2024.2.0729

04	Meerab Sarfraz, Memoona Mahmud, Moazama Batool, Qurat u lain, <b>Sadia Maalik</b> , Sajida Mushtaq	Potential Benefits of Pomegrar Fish Diet and Fish Products: A	
05	Sadia Saadat, <b>Sadia</b> Maalik, Arooj, Muhammad Ismail, Muhammad Tauqeer Ul Hassan, Kinza Ashraf, Laiba Mateen, Ayesha Kabir, Rana Muhammad Mazhar Ali, Fareeha Ansir	Effect of black cumin (Nigella sativa) seed as a natural preservative and sodium acetate as a synthetic preservative on protein and fat contents of rohu (Labeo rohita) and mori (Cirihinus mrigala)	Eur. Chem. Bull. <b>2024</b> , 13(Regular Issue 02), 51 –60 <b>DOI:</b> 10.53555/ecb/2024.13.02 .07
06	Bakhtawar Somro, Shakeel ahmad memon, Saida Mushtaq, <b>Sadia Malik</b>	Incidence of Cestode Parasites and Assessment of Histopathological Alterations in the Intestine of Domestic Pigeons (Columba livia domestica) in District Hyderabad, Sindh, Pakistan	Markhor the Journal of Zoology. 2024 Volume:5, Issue 1 DOI: https://doi.org/10.54393/mjz.v5i01. 91
07	Wajeeha Tanveer, Sajida Mushtaq, Nimra Ijaz, Moazama Batool, Sadia Maalik	Amazon rainforest wildfires: causes and impact on mammalian and avian diversity	Uni. Sindh. J. Anim. Sci., vol. 8(1); 59-69, 2024  https://doi.org/10.57038/usjas.v8i01.6962
08	Muhammad Ramzan, Ghulam Murtaza, <b>Sadia Maalik.</b> Sajida Mushtaq, Waqar Majeed.	Age-stage two sex life table of an alarming quarantine pest, Togodermagranarium on stored products	Journal of Zoological Systematics and Evolutionary Research Volume 2024, Article ID 8896414, 10 pages https://doi.org/10.1155/2 024/8896414 IF: 2.42 W category
09	Nazish Kanwal,*,Sajida Mushtaq, <b>Sadia</b>	Diversity of Syrphid flies in district Sialkot	Pakistan Research Journal of Biological Sciences 2023

	Maalik, Razia Ishaq.		ISSN No.
	Traum, Itazia isnaq.		3005-6845
10	Suneela, Sajida Mushtaq, <b>Sadia</b>	Insect Faunal Diversity and Relative Abundance,	BIOLOGIA 69(2):40-47.
	Maalik, Asma Waheed	Associated with Trifolium	http://dx.doi.org/10.1758
	Qureshi, Moazama	alexandrinum (Berseem) in	2/journal.Biologia/2023/
	Batool	District Sialkot, Pakistan	<u>69.2.40.47</u>
			2023
			ISSN: 0006-3096
11	Moazama Batool,	Evaluation of Serum	Journal of Zoology and
	Rabia Khalid, Qurat Ul Ain, <b>Sadia Maalik,</b>	Biochemical Parameters of	Systematics
	Sajida Mushtaq,	CirrhinusMirigala under acute	Vol 1(2) https://doi.org/10.56946/jzs.v1
	Mamoona Mahmood	exposure of Arsenic	<u>i2.220</u>
			2023 (Y Category)
12	Sajida Mushtaq, Sadia	Developmental analysis and	Pakistan Journal of
	Maalik, Shahnaz	predatory potential of	Agriculture Sciences
	Akhtar Rana, Waqar	EupeodesCorollae	60(1):185- 191DOI: <u>10.21162/PAKJAS/</u>
	Majeed and Nazia Ehsan	(Fabricius, 1794) (Diptera:	23.3
	Elisali	Syrphidae) against aphids: A Practical approach of	2023
		biological control.	IF: 0.856 X category
13	Sadia Maalik, Sajida	Diversity and relative	WORLD JOURNAL OF
	Mushtaq, Naheed	abundance of braconids	BIOLOGY AND
	Bano, Moazama	(Hymenoptera) among selected	BIOTECHNOLOGY
	Batool, Ayesha Hafeez	crops of District Faisalabad,	https://doi.org/10.33865/wj
		Pakistan	<u>b.009.01.1125</u>
			2023 (Y Category) Accepted (online
			available)
			a valiable)
14	Moazama Batool,	Arsecnic Induced Toxic	Pakistan Research Journal
	Hijab Tariq, Huma	Impacts on the Growth	of Biological Sciences 2023
	Naz, Sajida Mushtaq,	Performance and	
	Sadia Maalik and	Haematological Aspects of	
	Mamoona Mahmood	Rahu (Labeorohita)	
15	Sadia Maalik, Sajida	Appraisal of diversity and	$\mathcal{C}$
	Mushtaq, Noreen Rana, Nazia Ehsan'Naheed	relative abundance o lepidopteran fauna fron	research 60(4): 303-313
	Bano and Aisha hafeez	cropland ecosystem from distric	` /
		Faisalabad, pakistan	( <b>g,</b> )

16	Muhammad Idrees. Muhammad Dildar Gogi.Waqar Majeed. Mobeen Mozamal. Hafiz Muhammad	Hormoligosis Evaluation and Efficacy of Fenoxycarb on the Cotton Mealybug ( <i>Phenacoccus</i> solenopsis)	Brazilian Archieves of Biology and Technology Vol.65: e22210631, 2022 <a href="https://doi.org/10.1590/1678-4324-2022210631">https://doi.org/10.1590/1678-4324-2022210631</a>
	Imran.Sobia Kanwal and <b>Sadia Maalik.</b> 2022		IF: 0.579
17	Huma Aslam, Sajida Mushtaq, <b>Sadia Maalik</b> , Naheed Bano, Emad M Eed, Amir Bibi, Ayesha Tahir, Iram Ijaz, Samina Tanwir, Amany S Khalifa. 2022	Exploring the effect of Jasmonic Acid for Aphids control for improving the yield of Triticum aestivum varieties	PeerJ. Vol 10 e14018. DOI 10.7717/peerj.14018 category w IF: 3.061
18	M Yasin, HA Khan, W Majeed, S Mushtaq, A Hedfi, <b>S Maalik</b> , M Ben Ali, S Mustafa, S Kanwal, S Tahreem, 2022	Investigation of roost composition of passerine birds in different environmental conditions	Brazilian Journal of Biology. Volume 82. e263354. https://doi.org/10.1590/151 9-6984.263354 Category X 1.32
19	Ayesha Asghar, Omema Qadeer, Sajida Mushtaq, <b>Sadia Maalik,</b> Waqar Majeed, Naheed bano, Shahla Nargis. 2022	Assessment of insects diversity with influence of industrial pollutants in agricultural zones of District Sialkot, Pakistan	Biodiversitas 23(4) 2047- 2053 DOI: 10.13057/biodiv/d23044 0
20	Sadia Maalik, Sajida Mushtaq, Moazama Batool, Nazia Ehsan, Naheed Bano and Ayesha Hafeez. 2022.	Approximation of agricultural loss caused by pernicious larvae of Helicoverpa armigera (Noctuidae; Lepidoptera) by analysis of feeding potential on selected plants	Journal of Entomologica research 46(1) 24-27 DOI: 10.5958/0974 4576.2022.00003.2
21	Asma Asghar, Hafiz Muhammad Imran, Naheed Bano, <b>Sadia</b> <b>Maalik</b> , Sajida Mushtaq, Asim Hussain, Sunita Varjani, Lotfi Aleya, Hafiz MN Iqbal, Muhammad Bilal	SARS-COV-2/COVID-19: scenario, epidemiology, adaptive mutations, and environmental factors	Environmental Science and Pollution Research 29 (46), 69117-69136 (2022)
22	Naheed Bano, Amir Nadeem, <b>Sadia</b> <b>Maalik,</b> Sajida Mushtaq, Naeem Iqbal, Ahmad Kamran Khan, Asghar Shabbirf,	Effect of insecticides on erythrocytes of indeginous fish <i>Labeo rohita</i>	Journal of King Saud University – Science 101586 Published online IF: 4.01

	N. 1 1.T		
	Muhammad Imran,		
	Safia Niaz, Muhammad		
	Yasini,		
	Mirza Abdul Qayyum,		
	Bashir Ahmad, Milan		
	Skalicky, Sulaiman Ali		
	Alharbi, Saleh Alfarraj		
	2021		
23	Moazama Batool, Sajid	Growth performance and	Punjab University Journal
	Abdullah, Huma Naz,	amassment of heavy metals in	of Zoology. 36(2): 125-130
	Mubashar Hussain,	carnivorous fish species, Channa	
	<b>Sadia Maalik,</b> Sajida	marulius and Wallago attu.	/journal.pujz/2021.36.2.12
	Mushtaq and Laiba		<u>5.130</u>
	Shafique. 2021.		
24	Amina Ghani and Sadia	Assessment of diversity and	(2020) Journal of King
	<b>Maalik. 2020</b>	relative abundance of insect	Saud University - Science
		fauna	32 . 986–995.
		associated with Triticum	
		aestivum from district Sialkot,	Impact Factor: 4.01
		Pakistan.	
25	Huma Naz, Sajid	Toxic effect of insecticides	(2019)
	Abdullah, Khalid Abbas	mixtures on antioxidant enzymes	Delvistan I Zool vol
	Wardah Hassan,	in different organs of fish, Labed	Pakistan J. Zool., vol
	MoazamaBatool,Shakee	rohita.	51(4): 1355-1361.
	a Perveen, <b>Sadia Maalik</b>		Impact Factor: 0.79
	and Sajida Mushtaq.		<b>p</b>
26	Naureen Rana, Saira	Pest vs. predator communities in	
	Javed, Muhammad Zafar	citrus orchards under ecological	Journal of entomology and
	Iqbal, Ushna Bashir	conditions of district tobatek	Zoology studies. 2017.
	Rana, Abid Ali, <b>Sadia</b>	singh (Punjab) Pakistan.	5(6): 481-489.
	Maalik and Somia Afza		` '
27	Mushtaq, S., S. A. Rana,	1	(2014)
	N. Rana, <b>S. Maalik,</b> N.	Predatory Efficiency of	Int. J. Agric. Biol., Vol. 16
	Ehsan.	Episyrphus balteatus (Diptera:	No. 3.
		Syrphidae) on Four Aphid	140. 5.
		Species in Pakistan.	Impact Factor 0.758
28	Maalik, S., S. A. Rana,	Diversity and abundance of	(2013)
	H. A. Khan and M.	lepidopteran populations from	Dale I Ami Sai 50. 05
	Ashfaq.	selected crops of distric	Pak. J. Agri. Sci. 50: 95-
		Faisalabad, Pakistan.	101.
			Impact Factor: 1.24
29	Sial, N. T. Ruby, S.	A checklist of the spiders of	(2012)
	Maalik and S. Mushtaq.	cholistan and neighboring areas.	Dl. I A C.: 4: 255
	•		Pak. J. Agri. Sci. 4: 355

			358. Impact Factor: 1.24
30	Ruby, T., T. Hussain, N. Sial, <b>S. Maalik</b> and S. Mushtaq.	Survivorship of ground spider Pardosa oakley (Gravely) under laboratory conditions on natural and artificial diets.	

# **Book chapter Publication:**

S.No.	Title of the Book	ISSBN	Year, Publisher
1	Zoology: Advancements	978-627-7745-02-8	2024
	and Research Trends		

#### RESEARCH REPORT

Rana, S. A., N. Rana, S. Maalik, S. Mushtaq T. Ruby and M. N. Abbas. 2013. Investigation of potential synergies between biodiversity and farm production sustainability. 3rd Annual Report of the Project No. 20-813, Higher Education Commission, Islamabad.

# SCIENTIFIC ARTICLES PUBLICATION

Articles Publication (In Urdu)

**♣ Maalik, S. 2013**. "Role of Braconidae to control caterpillars and increase in crop yield". "Zari Digest", University of Agriculture, Faisalabad.

# Articles Publication (In English)

**Maalik, S. 2013**. "Braconids as important and environmentally friendly control measures for lepidopteran caterpillars". University of Agriculture, Faisalabad.

# **Students Supervised/Co supervised**

SR#	Name	Title	Supervisor/cosupervisor
1	Amna Ghani	Assessment of diversity and relative abundance of insect fauna associated with  Triticum aestivum (Wheat) by using sweep method from district Sialkot	Supervisor
2	Salma Khurshid	Effect of selected preservatives on ether extract and protein content of Rohu ( <i>Labeo rohita</i> ) and Mori ( <i>Cirrhinus mrigala</i> )	Supervisor
3	Sobia Sadiq	Estimation of diversity and relative abundance	Supervisor

		of insect fauna associated with Triticum	
		aestivum (Wheat) by using quadrate method	
		in district Sialkot	
4	Ujala Kainat	Effect of freezing on ether extract and	Supervisor
		protein contents of Rohu (Labeo rohita) and	
		Mori (Cirrhinus mrigala)	
5	Suneela	Study of eco-biology, diversity and relative	Co-supervisor
		abundance of insect fauna of Zea mays (	
		Maize) and Trifolium alexandrinum (Berseem	
		) by using quadrate method from district	
		Sialkot.	
6	Iqra Aslam	Protective effect of <i>Tephrosia lupinifolia DC</i> .	Co-supervisor
		extract against Cadmium induced pulmonary	
		and cardiotoxicity in Sprague-Dawley rats.	
7	Saima Amin	Effect of salting on ether extract and protein	Co-supervisor
	Bhutta	contents of Rohu (Labeo rohita) and Mori	
		(Cirrhinus mrigala)	
8	Imza Rouf Butt	Effect of drying on ether extract and protein	Co-supervisor
		contents of Rohu (Labeo rohita) and Mori	
		(Cirrhinus mrigala)	
9	Anam Sarwar	Study of eco biology, diversity and relative	Co-supervisor
		abundance of insect fauna of Zea mays	
		(Maize) and Trifolium alexandrinum	
		(Berseem) by using sweep from district Sialkot	
10	Sadia Saadat	Effect of Black cumin seed as natural	Supervisor
	17-M/Zool/06	preservative and Sodium acetate as synthetic Preservative on protein and fat contents of	
		Rohu (Labeo rohita) and Mori (Cirrhinus	
11	Syeda Hifza ijaz	mrigala) Effect of selected natural preservatives	Supervisor
	17-M/Zool/07	(Lemongrass and Turmeric) on protein and fat	Super visor
		contents of Rohu ( <i>Labeo rohita</i> ) and Mori ( <i>Cirrhinus mrigala</i> )	
12	Ayesha Asghar	Study of Insect faunal diversity as bio	Supervisor
	Zool-1605	indicator of heavy metal, Cadmium and	
		Lead contamination in rice crop irrigated	
		with tanneries waste water in district	

		Sialkot	
13	Samia Bano 16-M/Zool/10	Diversity and relative abundance of insect fauna in rice crop and the effect of toxic metals Chromium and Nickle on them present in waste water of tanneries used for irrigation	Supervisor
14	Sadia Saadat 17-M/ Zool/06	Effect of Black cumin seed as natural preservative and Sodium acetate as synthetic preservative on protein and fat contents of Rohu ( <i>Labeo rohita</i> ) and Mori ( <i>Cirrhinus mrigala</i> )	Supervisor
15	Syeda Hifza Ijaz Zool-1707	Effect of selected natural preservatives lemongrass and turmeric on protein and fat contents of Rohu (Labeo rohita) and mori (Cirrhinus mrigala)	Supervisor
16	Ayesha Hafeez 16-M.Sc/Zool/14	Exploration of selected agro-ecosystems of central Punjab to assess diversity and relative abundance of lepidopteran fauna (order: Lepidoptera)	Supervisor
17	Rukhmal Azhar 16-M.Sc/Zool/07	Faunal diversity of braconid larval parasitoid (Hymenoptera: Braconidae) of selected agroecosystem of district Faisalabad	Supervisor
18	Nehal Khalid Zool-19001	Diversity and Relative Abundance of Order Lepidoptera from Agroecosystem of District Sialkot, Pakistan	Supervisor
19	Mamuna Zulfiqar ZooL-19010	Determination of the Impacts of Selected Natural and Synthetic Insecticides on Aphids Order: Homoptera	Supervisor
20	Nayab Aslam Zool-19011	Determination of Impact of Selected Natural and Synthetic Insecticides on Grasshoppers Order: Orthoptera	Supervisor
21	Zainab Sarfraz Zool-190t2	Assessment of Diversity along with Relative Abundance of Order Coleoptera from Selected Localities of District Sialkot	Supervisor
22	Ujala Amjad	Impact of selected insecticides on Lepidopteran populations of selected crops of district Sialkot	Supervisor
	MS-Zool-001		
23	Aleena Yousaf MS-Zool-001	Effect of selected insecticides on coleopteran foliage fauna of district Sialkot	Supervisor
24	Kaynat Shahzadi MS-Zool-001	Diversity of ground fauna of Coleopteran in crops of district Sialkot and impact of selected insecticides	Supervisor

25	Nimra MS-Zool-001	Impact of selected insecticides on hymenopteran fauna of selected crops of district Sialkot	Supervisor
26	Rabia Nawaz 2021-GCWUS- 1866	Effect of acephate and profenofos on selected species of order Hymenoptera and its diversity in crop system of district Sialkot.	Supervisor
27	Fatima Tahir Khan 2021- GCWUS-1880	Assessment of diversity of order Hemiptera in crop system of district Sialkot and impact of accephate and profenofos on selected species	Supervisor
28	Farah 2021-GCWUS- 1881	Diversity and impact of accephate and profenofos on selected insect pollinators of crop system in district Sialkot. Pakistan.	Supervisor
29	Urfa Tariq 2021-GCWUS- 1882	Synergetic role of selected lepidopterans in agroecosystem of Sialkot and impact of selected insecticides	Supervisor
30	Mehrunisa Butt 18-B/Zool/142	Determination of recommended doses for weedicide (Atlantis) and insecticide (Dichlorovus) on selected hymenopteran fauna for crop system sustainability for district Sialkot.	Viva stage
31	Saba Shafique 2022-GCWUS- 2017	Assessment of LC 50 of Atlantis and Dichlorovus on selected species of homoptera for ecosystem sustainability in district Sialkot	Viva stage
32	Faiqa Tariq 2022-GCWUS- 2010	Synergetic effect of Atlantis and Dichlorovus in containing selected lepidopteran populations for sustainability of agroecosystem of district Sialkot	Viva stage
33	Maryam	Diversity analysis of order coleoptera from cropland ecosystem of District Sialkot and DNA barcoding of selected species.	Research ongoing
34	Atqa	Estimation of heterogeneity of order hymenoptera from cropland of District Sialkot and DNA barcoding of selected abundant species.	Research ongoing
35	Tayyaba	Estimation of repellence activity of lavender and peppermint oils against mosquitoes and houseflies through microencapsulation	Research ongoing

# PAPERS PRESENTED IN CONFERENCES

**O-21/ICAZ-2024** -Mamoona Mahmood, MoazamaBatool, Quratul Ain, Asma Aziz, **Sadia Maalik**, Sajida Mushtaq, Mehwish David. Effects of di-butyl and di-isononyl phthalate on antioxidant enzyme status and DNA damage in *Cyprinuscarpio*(Common carp).7<sup>th</sup> International Conference on Applied Zoology organized by The Applied Zoological Society of Pakistan Held on 22 -23<sup>rd</sup> October 2024.

- O-93/ICAZ-2024- Sadia Maalik, Zainab Sarfraz, Sajida Mushtaq, MoazamaBatool,NaheedBano, Ayesha Hafeez. PCR bases SCAR primer development using RAPD primers for Chrysolinaoricalcia (order; Coleoptera).7<sup>th</sup> International Conference on Applied Zoology organized by The Applied Zoological Society of Pakistan Held on 22 -23<sup>rd</sup> October 2024.
- **O-109/ICAZ-2024-** Fatima Talib, Qurat-ul-Ain, MoazamaBatool, Mehwish David, Ayesha Saddiqa, Sajida Mushtaq, **Sadia Maalik.** Therapeutic Potential of Vitamin C and Zinc against Furan Induced Reproductive Toxicity in Rats.7<sup>th</sup> International Conference on Applied Zoology organized by The Applied Zoological Society of Pakistan Held on 22 23<sup>rd</sup> October 2024.
- **CBGP-164-** Rabia Khalid, Moazama Batool, **Sadia Maalik**, Sajida Mushtaq, Huma Naz and Mehwish Qamar. Evaluation of serm biochemical parameters of *Cirrhinus mrigala* under acute exposure or arsenic. 40<sup>th</sup> PAKISTAN CONGRESS OF ZOOLOGY (International) March 10-12, 2020.
- **CBGP-165-**Ayesha Asghar, **Sadia Maalik**, Sajida Mushtaq, Noreen Rana, Moazama Batool, Nazia Ehsan and Mahwish Qamar. Estimation of faunal diversity affected by heavy metal, Cadmium and Lead contamination in rice crop irrigated with tanneries wastewater in district Sialkot. 40<sup>th</sup> PAKISTAN CONGRESS OF ZOOLOGY (International) March 10-12, 2020.
- **CBGP-166-**Omema Qadeer, Sajida Mushtaq, **Sadia Maalik**, Noreen Rana, Moazama Batool, Nazia Ehsan and Mehwish Qamer. Study of effects of selected metals cadmium and lead on insect fauna of *Brassica* crop irrigated with tanneries wastewater in district Sialkot. 40<sup>th</sup> PAKISTAN CONGRESS OF ZOOLOGY (International) March 10-12, 2020.
- **ENT-60-** Rafia Ashraf, Sajida Mushtaq, **Sadia Maalik**, Moazama Batool and Huma Naz. Insect faunal diversity from *Brassica* crop along with metals accumulation (Chromium and Nickel) n them in district Sialkot. 40<sup>th</sup> PAKISTAN CONGRESS OF ZOOLOGY (International) March 10-12, 2020.
- **FEWFM-24-**Sadia Sadat, **Sadia Maalik**, Sajida Mushtaq, Noreen Rana, Moazama Batool, Nazia Ehsan, Naheed Bano and Huma Naz. Investigation of the effect of selected natural (Black Cumin) and synthetic preservative (Sodium Acetate) on protein and fat content of *L. rohita*. 40<sup>th</sup> PAKISTAN CONGRESS OF ZOOLOGY (International) March 10-12, 2020.
- **FEWFM-25-**Urooj Malik, Sajida Mushtaq, **Sadia Maalik**, Noreen Rana, Moazama Batool, Nazia Ehsan, Naheed Bano and Huma Naz. Effect of Cinnamon and Garlic on protein and fat contents of Rohu (*Labeo rohita*). 40<sup>th</sup> PAKISTAN CONGRESS OF ZOOLOGY (International) March 10-12, 2020.
- **POSTER-123-**Hijab Tariq, Moazama Batool, Huma Naz, **Sadia Maalik**, Sajida Mushtaq and Mehwish Qamar. Assessment of toxic effect of arsenic on growth and haematological parameters of *Labeo rohita* during sub-lethal exposure. 40<sup>th</sup> PAKISTAN CONGRESS OF ZOOLOGY (International) March 10-12, 2020.
- **PC-18-** Nazia Ehsan, Naureen Rana, Saima Yousaf, **Sadia Maalik**, Sajida Mushtaq and , Sehla Akaash. Protective Effect of plant Extracts Against Deltamethrin induced

- toxicity in Rats. 40<sup>th</sup> PAKISTAN CONGRESS OF ZOOLOGY (International) March 10-12, 2020.
- **ENT-31-**Hafiza Aqsa, Naureen Rana, Waqar Majeed, Thais Melo Almeida, Imran Ahmed Raja, Sajida Mushtaq and **Sadia Maalik.** Dipteran Population in Domestic and Natural Territory. 40<sup>th</sup> PAKISTAN CONGRESS OF ZOOLOGY (International) March 10-12, 2020.
- **ENT-35-**Kainat Ahmad, Naureen Rana, Nazia Ehsan, Saher Shabbir, Imran Ahmed Raja, Sajida Mushtaq and **Sadia Maalik**. Acceptability of Nocturnal Insect Regarding different Solution. 40<sup>th</sup> PAKISTAN CONGRESS OF ZOOLOGY (International) March 10-12, 2020.
- MEET-2020-STM-94 Sajida Mushtaq, Ayesha Asghar, Omema Qadeer, Sadia Maalik, Moazma Batool and Humma Naz. 2020. Assessment of concentration of selected metals Cadmium and Lead and their impact on insect faunal diversity of Rice and *Brassica* crop cultivated near tannery area of district Sialkot. 1<sup>st</sup> Multidisciplinary National Conference held on March 4, 2020. At UNIVERSITY OF JHANG.
- Salma Khurshid, **Sadia Maalik**, Sajida Mushtaq, Naheed Bano and Moazama Batool. Effect of selected preservatives on ether extracts and proteins of Rohu (*Labeorohita*) and Mori (*Cirrhinusmrigala*). International Fisheries and Aquaculture Conference-2019, January 30-31,
- Sobia Sadiq, **Sadia Maalik**,Sajida Mushtaq, Naheed Bano and Moazama Batool. Assessment Of Diversity And Relative Abundance Of Insect Fauna Associated With *Triticumaestivum* (Wheat) By Using Sweep Method From District Sialkot. 39<sup>th</sup> PAKISTAN CONGRESS OF ZOOLOGY (International), held at University of Peshawar on March 4-6, 2019.
- Saima Amin Bhutta, Sajida Mushtaq, **Sadia Maalik**,Naheed Bano and Moazama Batool. Effect of salting on ether extract and protein of rohu(*Labeorohita*) and Mori (*Cirrhinusmrigala*). International Fisheries and Aquaculture Conference-2019, January 30-31,
- Anam Sarwar, Sajida Mushtaq, **Sadia Maalik**, Moazama Batooland Naheed Bano. Study of eco-biology, diversity and relative abundance of insect fauna of *Zea mays* (maize) and *Trifoliumalexandrinum* (Berseem) by using sweep method from district Sialkot.39<sup>th</sup> PAKISTAN CONGRESS OF ZOOLOGY (International) held at University of Peshawar on March 4-6, 2019.
- Moazama Batool, Sajid Abdullah, Qurra-tul-ain, Huma Naz, **SadiaMaalik** and Sajida Mushtaq/ Purification and partial characterization of Superoxide dismutase (SOD) enzyme from chronic cadmium exposed carnivorous fish organs (*Channamarulius*). International Fisheries and Aquaculture Conference-2019, January 30-31,
- Huma Naz, Sajid Abdullah, Khalid Abbas, Muhammad Anjum Zia, Moazama Batool,Irfan Baboo and **Sadia Maalik.** Kinetic and thermodynamic characterization of Superoxide dismutase from liver of *Labeorohita* under stress

- of Pb+Cr mixture. International Fisheries and Aquaculture Conference-2019, January 30-31,
- **Maalik S.,** S. A. Rana, N. Rana, S. Mushtaq, N. Bano and N. Ehsan. 2018. Estimation of extent of damage and life cycle of a pest *Pieris brassicae* (*Lepidoptera*: Pieridae) on four crop plants. 38<sup>th</sup> International congress of zoology at University of Punjab Lahore.
- Nasrullah, S., S. Mushtaq, S. Maalik, A. Sarwar and M. Qamer. 2018. Study on diversity, relative abundance and distribution of grasshoppers in *Zea mays* crop in district Sialkot, Punjab, Pakistan. 38<sup>th</sup> International congress of zoology at University of Punjab Lahore.
- Qamer, M. **S. Maalik,** S. Mushtaq, N. Bano, M. Batool and S. Imran. 2018. Effect of Corn based Feed ingredients with varying Protein levels on Growth performance of *Labeo rohita*. 38<sup>th</sup> International congress of zoology at University of Punjab Labore
- Kainat, U. **S. Maalik,** S. Mushtaq, N. Bano, M. Batool and Imza Rauf. 2018. Effect of freezing on Ether extract and protein content of Rohu (*Labeo rohita*) and Mori (*Cirrhinus mrigala*). 38<sup>th</sup> International congress of zoology at University of Punjab Lahore
- Batool, M., S. Abdullah, **S. Maalik**, S. Mushtaq, M. Fatima and H. Naz. 2018. Effect of chronic exposure of metals on the growth performance of *Channa marulius* and *Wallago attu*. 38<sup>th</sup> Congress of Zoology, 27 feb- 1<sup>st</sup> March, 2018.
- Mushtaq, S. S. Maalik, N. Rana, N. Ehsan, S. Imran, M. Razaq and M. Mahmood. 2017 Comparative study related to Predatory preference of *Melanostoma scalare* (Aphidophagus hoverfly: Syrphidae) on four aphid species in Punjab, Pakistan. 37<sup>th</sup> International congress of zoology at GCUF.
- Imran, S. M. Qamer, **S. Maalik,** S. Mushtaq, R. Sajjad,M. Mahmood, S. Nawaz and s. Shakeel. 2017. Comparative study of Relative Circulatory proteins between Non Insulin dependent diabetes mellitus (NIDDM) ans normal female local population. 37<sup>th</sup> International congress of zoology at GCWUS.
- Mahmood, M. **S. Maalik,** S. Mushtaq and M. Qamer. 2017." Serotonin, a novel drug for Neurodegeneration in mouse model". 37<sup>th</sup> International congress of zoology at GCWUS.
- Rahat, Z. S. Maalik, S. Mushtaq and S. Shakeel. 2017. Diversity and Relative Abundance of Braconid larval parasitoids in crop system of Faisalabad. 37<sup>th</sup> International congress of zoology at GC University, Faisalabad.

- Sadiq, S., **S. Maalik**, S. Mushtaq and S. Nawaz. 2017. Seasonal variation of Braconid larval parasitoids in crop system of Faisalabad. 37<sup>th</sup> International congress of zoology at GC University, Faisalabad.
- Khurshid, S., **S. Maalik,** S. Mushtaq and S. amin. 2017. Temporal distribution of some lepidopteran species from crop system of Faisalabad. 37<sup>th</sup> International congress of zoology at GC University, Faisalabad.
- Sarwar, A., **S. Maalik,** S. Mushtaq and M. qamar. 2017. Determination of host preference of Pieris brassicae (Lepidoptera:pieridae) on four selected crops. 37<sup>th</sup> International congress of zoology at GC University, Faisalabad.
- Nasrulla, S., **S. Maalik,** S. Mushtaq and M. Mahmud. 2017. In vitro control of Lepidopteran caterpillars by Braconid larval parasitois. 37<sup>th</sup> International congress of zoology at GC University, Faisalabad.
- Ghani, A., **S. Maalik,** S. Mushtaq, N. Rana and N. Ehsan. 2017. Estimation of Life Cycle of Pieris brassicae (Lepidoptera:Pieridae) on four selected host plants. 37<sup>th</sup> International congress of zoology at GC University, Faisalabad.
- **Maalik, S.,** S. A. Rana, N. Rana, S. Mushtaq and Nazia Ehsan. 2017. Estimation of life cycle of *Spodoptera exigua* (Lepidoptera: Noctuidae) on four selected host plants. 37<sup>th</sup> International congress of zoology at GC University, Faisalabad.
- Rana, N., M. Y. Muhammad, Z. Iqbal, S. Afzal, S. Maalik and S. Nargis. 2016. Temporo-spatial distribution of soil macro-fauna among citrus orchards. 36<sup>th</sup> Pakistan Congress of zoology (international) held on16-18 February, at Department of Zoology, University of Sindh, Jamshoro.
- Rana, N., A. Anwar, M. Z. Iqbal, N. Ehsan, **S. Maalik** and S. Afzal. 2016. Occurrence of soil macro-fauna among okra (*Abelmoschus esculentus* 1.), tomato S*solanum lycopersicum* 1.) and cauliflower (*Brassica oleracea*) fields. 36<sup>th</sup> Pakistan Congress of zoology (international) held on16-18 February, at Department of Zoology, University of Sindh, Jamshoro.
- Mushtaq, S., S. A. Rana, N. Rana, **S. Maalik** and N. Ehsan. 2016. Spatio-temporal distribution of family Syrphidae in crop system of Faisalabad. 36<sup>th</sup> Pakistan Congress of zoology (international) held on16-18 February, at Department of Zoology, University of Sindh, Jamshoro.

- **Maalik, S.,** S. A. Rana, N. Rana, S. Mushtaq and N. Ehsan. 2016. Estimation of extent of foraging of *Helicoverpa armigera* (lepidopteran: Noctuidae) on four different crops in district Faisalabad. 36<sup>th</sup> Pakistan Congress of zoology (international) held on 16-18 February, at Department of Zoology, University of Sindh, Jamshoro.
- Mushtaq, S. S. A. Rana, N. Rana, **S. Maalik** and N. Ehsan. 2014. Predator-prey interactions of syrphids and aphids in cropland of Faisalabad. 34<sup>th</sup> Pakistan Congress of zoology (international) held on 25-27 February, at Bahauddin Zakaria University, Multan.
- Mubeen, M., S. A. Rana, N. Rana, S. Mushtaq and **S. Maalik**. 2014. Interaction of selected coccinellid species with different aphid species occurring in Brassica crop fields . 34<sup>th</sup> Pakistan Congress of zoology (international) held on 25-27 February, at Bahauddin Zakaria University, Multan.
- Maalik, S., S. A. Rana, N. Rana, S. Mushtaq and M. Mubeen. 2014. Estimation of damage of selected species of Lepidoptera on selected host plants. 34<sup>th</sup> Pakistan Congress of zoology (international) held on 25-27 February, at Bahauddin Zakaria University, Multan.
- Rana, S. A., N. Rana, **S. Maalik** and S. Mushtaq. 2014. Investigation of potential synergies between biodiversity and farm production sustainability. 34<sup>th</sup> Pakistan Congress of zoology (international) held on 25-27 February, at Bahauddin Zakaria University, Multan.
- Rana, N., S. A. Rana, N. Ehsan, **S. Maalik** and S. Mushtaq. 2014. Association of some selected soil inhabiting predator and prey species in wheat-sugar agro-ecosystem of Faisalabad, Pakistan. 34<sup>th</sup> Pakistan Congress of zoology (international) held on 25-27 February, at Bahauddin Zakaria University, Multan.
- **Maalik, S.**, S. A. Rana, N. Rana, S. Mushtaq, N. Ehsan and T. Ruby. 2013. Host-parasitoid relationship among family Braconidae (Hymenoptera) and selected Lepidopterans in croplands of Faisalabad, Pakistan. 33<sup>rd</sup> pak. Congress of zoology (international) held on 02-04 April, at PMNH and PMAS-Arid Agriculture University, Rawalpindi.
- Mushtaq, S., S. A. Rana, N. Rana, **Maalik, S.,**N. Ehsan and N. Bano. 2013. Diversity and abundance of Aphids Occurring on different cultivations of Faisalabad. 33<sup>rd</sup> pak. Congress of zoology (international) held on 02-04 April, at PMNH and PMAS-Arid Agriculture University, Rawalpindi.
- Ehsan, N., H. A. Khan, N. Rana, **S. Maalik**, S. Mushtaq and N. Bano. 2012. Assessment of damage control caused by *Psitaculla krameri* using a mechanical repellent at mature and post harvest stages of wheat and maize. 33<sup>rd</sup> pak. Congress of zoology (international) held on 02-04 April, at PMNH and PMAS-Arid Agriculture University, Rawalpindi.

- Bano, N., M. Afzal, **S. Maalik** and S. Mushtaq. 2013. Identification and characterization of pathogens in fish in different areas of Punjab. 33<sup>rd</sup> pak. Congress of zoology (international) held on 02-04 April, at PMNH and PMAS-Arid Agriculture University, Rawalpindi.
- Rana, S. A., **S. Maalik,** N. Rana, N. Ehsan, T. Ruby and N. Abbass. 2012. Feeding efficiency and developmental period of *Spodoptera exigua* (Lepidoptera; Noctuidae) on different host plants. 32<sup>nd</sup> pak. Congress of zoology (international) held on 06-08 March, at GC University, Lahore.
- Rana, S. A., S. Mushtaq, N. Rana, **S. Maalik,** T. Ruby and N. Abbass. 2012. Effect on development and prey preference of *Episyrphus balteatus* on two species of aphids. 32<sup>nd</sup> pak. Congress of zoology (international) held on 06-08 March, at GC University, Lahore.
- Mubeen, M., S. A. Rana, N. Rana, M. Hassan, S. Mushtaq and **S. Maalik**. 2012. Predator-prey relationship of coccinellids and different aphid species occurring in brassica crop fields. 32<sup>nd</sup> pak. Congress of zoology (international) held on 06-08 March, at GC University, Lahore.
- Bano, N., M. Afzal, M. Naeem, A. Salam, **S. Maalik** and S. Mushtaq. 2012. Light-weight and condition factor relationship of two fish species caught from the river Indus, Pakistan. 32<sup>nd</sup> pak. Congress of zoology (international) held on 06-08 March, at GC University, Lahore.
- Ruby, T., S. A. Rana, N. Rana, N. Sial, **S. Maalik** and S. Mushtaq. 2012. Genetic diversity of six spotted zigzag ladybird (*Cheilomenes sexmaculata*, Coleoptera) population from various agro-ecosystems of Punjab, Pakistan. 32<sup>nd</sup> pak. Congress of zoology (international) held on 06-08 March, at GC University, Lahore.
- **Maalik, S.**, S. A. Rana. N. Rana, S. Mushtaq and T. Ruby. 2011. Relative abundance and role of braconid larval parasitoids in containing lepidopteran populations in district Faisalabad. 31<sup>st</sup> pak. Congress of zoology (international) held on 19-21 March, atUniversity of Azad Jammu and Kashmir, Muzafarabad.
- Ruby, T., S. A. Rana, N. Rana, T. P. Inayat and **S. Maalik.** 2011. Predatory-prey association among selected arthropod species in the cropland of Punjab, Pakistan. 31<sup>st</sup> pak. Congress of zoology (international) held on 19-21 March, atUniversity of Azad Jammu and Kashmir, Muzafarabad.
- Abbas, M. N., S. A. Rana, N. Rana, M. Shahid, T. Ruby, S. Mushtaq and **S. Maalik.** 2011. Chemical evaluation associated weed seeds frequently mixed with wheat grains at harvest. 31<sup>st</sup> pak. Congress of zoology (international) held on 19-21 March, at University of Azad Jammu and Kashmir, Muzafarabad.
- **Maalik, S.** S. A. Rana and N. Rana. 2010. Feeding links of various arthropod populations occurring on vegetables. 30<sup>th</sup> Pakistan Congress of Zoology held at University of Agriculture, Fsd. on 2 -4 March, 2010.

# WORKSHOP/SEMINARS ATTENDED/organized

- ♣ Organized Pink ribbon campaign (Seminar On breast cancer and Stalls for pink ribbon) at GCWUS under Blood donor and health society, GCWUS Dated 18 october, 2024.
- Organized Awareness seminar and Fund raising campaign on Hemophilia at GCWUS under Blood donor and health society, GCWUS Dated 05 December 2024
- **↓** Organized a one day Seminar on "Shrimp Farming" with Walk/Project/Cooking Competition as a organizing committee member on World Fisheries Day held on 3<sup>rd</sup> December 2024 at Department of Zoology at GCWUS.
- **♣** Organized a Poster Competition on "Life Below Water" (SDG-14) as a organizing committee member held on 3<sup>rd</sup> December 2024 at Department of Zoology at GCWUS.
- **◆ Organized** a Poster Competition on "Life on Land" (SDG-15) as an Program coordinator held on 3<sup>rd</sup> December 2024 at Department of Zoology at GCWUS.
- ◆ Organized Anti-dengue campaign (Seminar/Walk) on "Collaborative and Comprehensive Approaches towards Dengue Management" as organizing committee member, held on 06 November 2024 at Government College Women University Sialkot.
- **◆ Organized** two Days Hands on Training on "Handling of Laboratory Animals in Biomedical Research" 15-16<sup>th</sup> October, 2024. Organized by Zoological Society in Collaboration with ORIC, GCWUS.
- ♣ Organized Seminar on Thalassemia, Under Zoological Society and Blood donor and Health Society at GCWUS dated 14-12-22
- ◆ Organized a seminar on **emergence of antibiotic resistance in world** under Zoological Society, GCWUS. 24 November, 2022
- **♣** Organized an awareness seminar on Breast Cancer and a blood donor compaign at GCWUS. 18 October, 2022.
- ♣ Participated in world Fisheries day, 08 December 2021.
- Attended a seminar on Covid-19 and vaccination compaign in Italy at glance organized by Department of Zoology, GC Women Univesity, Sialkot. 22 November 2021
- Attended a webnier on protection of intellectual property: filling process, and prosecution of patents. 12 October, 2021.
- 4 Attended **two days workshop on capacity building on Punjab procurement rules, 2014** at GC Women University Sialkot. 27 may to 28 may 2021
- **4** Attended a training session for how to select a right journal arranged by emarald 8<sup>th</sup> march 2021.
- 4 Attended a training session for how to survive arranged the peer review process arranged by emarald 22 march 2021.

- ♣ Attended Training Session for Entry of Publications on Scopus organized by QEC, GC Women University Sialkot, held on 24 September, 2020.
- ♣ Attended six day training on "HIGH PERFORMANCE LIQUID CHROMATOGRAPHY (HPLC)" at central lab, GCWUS HELD ON 14-16, 21-23, December, 2020.
- ♣ Participated in world Fisheries day, 29 november 2019.
- ◆ Organized one day training on **Biosafety practices in laboratory** in collaboration with NAYS and ORIC, GCWUS dated April 12, 2018 at GCWUS.
- A one day training workshop on "USE OF TURNITIN AND DIGITAL LIBRARY" on 12 July, 2016. at GC Women University Sialkot.
- Presented Seminar organized by Department of Zoology entitled as "Measures regarding prevention and control of *Naegleria fowleri* (Brain eating amoeba) in Punjab." held on 16 March, 2016 at GC Women University Sialkot.
- ♣ A training workshop entitled "Research Proposal Writing: Pre and post challenges" on December, 2015. At GC Women University Sialkot.
- Certificate of active Participation in one day National seminar titled "FUNCTIONAL FOODS; RECENT APPROACHES TOWARDS HUMAN HEALTH" on December 04, 2014. At department of Home Economics and Food Sciences, GC Women University, Faisalabad.
- ♣ Participation in one day Symposium titled "CHEMICAL APPROACHES TO COPE THE ENVIRONMENTAL HAZARDS" on 20<sup>th</sup> Nov, 2014. At Department of Chemistry, GC Women University, Faisalabad.
- ♣ Certificate of active Participation in seminar titled "Social Mobilization and communication for Dengue Epidemic" on November 10, 2014. At department of Zoology, GC Women University, Faisalabad.
- ♣ Award Certificate for participation in National Nanotechnology training workshop on "ADVANCED CHARACTERIZATION TECHNIQUES AND PRACTICAL APPLICATIONS OF NANOMATERIALS" dated October 27-29, 2014 at NIBGE.
- Five day International Training workdshop "SPECIES DISTRIBUTION MODELING TECHNIQUES" on April 10-14, 2012.
- \* 8<sup>th</sup> NATIONAL TRAINING COURSE ON MOLECULAR TECHNIQUES IN BIOTECHNOLOGY on April12-16, 2010. At National Institute for Biotechnology and Genetic Engineering
- ♣ Actively participated as member of organizing committee of 30<sup>th</sup> (International) Congress Pakistan congress of Zoology on March 2-4, 2010. at University of Agriculture, Faisalabad.

# **EXTRACURRICULAR ACTIVITIES**

- ➤ Incharge Blood donor and health society, GCWUS
- ➤ Member University ranking committee. GCWUS
- Member Committee to prepare/conduct the test at Par with GRE general and Subject for admission in MS and PhD or equivalent Programes. Zoology, GCWUS

- ➤ Member Zoological Society, Zoology, GCWUS
- ➤ Convener Discipline Committee, Zoology, GCWUS
- Member Technical Committee for Equipment, Zoology, GCWUS.
- ➤ Member Student Counselling committee, Zoology, GCWUS
- Member Examination Committee, Zoology, GCWUS.
- ➤ PhD Co-ordinator, Zoology, GCWUS.
- Convener Departmental QEC Committee, Zoology, GCWUS.
- ➤ Member technical committee for equipment, GCWUS.
- ➤ Member BOS, Zoology, GCWUS.
- ➤ Member Departmental Research Committee (DRPC)
- ➤ M.Phil Coordinator at Department of Zoology, GCWU S (2015 batch to 2020 batch).
- ➤ Departmental Focal Person of Prime Minister Laptop distribution Scheme at GCWU Sialkot for batch 1.
- ➤ Member of Dengue Control Committee at Govt. College Women University, Faisalabad.
- ➤ Hall Warden, Girls hostel at Govt. College Women University, Faisalabad.