

PERSONAL INFORMATION

MUHAMMAD RIZWAN

📍 House B-1 RICE RESEARCH INSTITUTE, KALA SHAH KAKU, 54000 Lahore (Pakistan)

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STUDIES APPLIED FOR

PhD

WORK EXPERIENCE

20/07/2012–Present

Assistant Research Officer

director.rice@gmail.com, Sheikhpura (Pakistan)

Research responsibilities:

- Rearing of rice planthoppers
- Rice biodiversity
- Insect ecology and management
- impact of sublethal doses on insect pest
- Non-chemical insect pest management in organic rice
- Spatio-temporal study of insect pests of rice
- Evaluation of insecticides against insect pests
- Evaluation of advanced rice germplasm for resistance against insect pests
- Stored grain pest management
- Report writing

Administrative responsibilities

- Focal person audit
- Focal person for court cases
- Service related issues of employees
- Focal person dengue eradication program
- In charge dispensary

EDUCATION AND TRAINING

09/09/2009–15/01/2012

M.Sc Agriculture Entomology, 18 Years (3.65/4.00) (76%)

University of Agriculture, Faisalabad (Pakistan)

Insect Morphology, Insect Taxonomy, Insect Ecology, Household Insect Pests, Pest Forecasting and Management, Stored Grain Pest Management, Preparation of Research project and Scientific Writing

08/09/2005–08/09/2009

B.Sc (HONS.) 16 Years (CGPA 3.51/4.00)

University of Agriculture, Faisalabad (Pakistan)

Introductory Entomology, Applied Entomology, Insect Morphology, Insect Taxonomy, Insect Ecology, Household Insect Pests, Insect Physiology, Classification of Adult Insects, Pest Forecasting and Management, Stored Grain Pest Management, Beneficial Insects, Agriculture and Environmental Pollution, Insect Life and Natural History, Agricultural Pests, Plant Resistance to Insect Pests, Insecticides and Their Application, Preparation of Research Project and Scientific Writing, Range and Forest Entomology, Insect Behaviour

25/03/2010–25/03/2010

Floriculture Industry: Exploring New Avenues in Pakistan

Institute of Horticultural Sciences, University of Agriculture, Faisalabad (Pakistan)

24/06/2019–25/06/2019 **Advance Statistical Techniques in Agricultural Research and Emerging Technology in Libraries & Internet Applications**
Statistical Section, Ayub Agricultural research Institute, Faisalabad (Pakistan)

21/01/2020–23/01/2020 **Statistical techniques in agricultural research and emerging technology in libraries and internet applications**
Statistical section, Ayub Agricultural Research Institute, Faisalabad (Pakistan)

PERSONAL SKILLS

Mother tongue(s) Urdu, Punjabi

Foreign language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C2	B2	C1	C1

English Proficiency Certificate

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
Common European Framework of Reference for Languages

Communication skills -Good communication skills gained through my experience and interaction with students, researchers, teachers etc.,

Organisational / managerial skills -Good managerial skills gained in Anti-Dengue campaign leading at sub-divisional level
-Lead the health teams and curb the menace of dengue fever at Tehsile Muridke, District Sheikhpura Punjab, Pakistan

Job-related skills -Off-season rearing of rice planthoppers in laboratory
-Capacity building of ice community, internees and co-workers regarding IPM
-Publication of work
-MS Word
-MS Excel
-Internet browsing

Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem-solving
Independent user	Independent user	Independent user	Independent user	Independent user

Digital skills - Self-assessment grid

Driving licence A1, B

ADDITIONAL INFORMATION

Publications **Research Papers:**
A- Submitted

- M. Rizwan**, B. Atta, M. Tahir, M. Raheel, W. Ashraf, Q. Shakeel, A.M. Sabir, S. Iqbal, M. Ali, 2020. Efficacy of fungi isolates against wheat aphid and *Coccinella septempunctata*. PlosOne
- M. Rizwan**, B. Atta, A.M. Sabir, K. Waqel, A. Khaki, 2020. Do neonicotinoids better than pyrethroids for IPM program involving ladybird beetle *Coccinella septempunctata* (Coleoptera: Coccinellidae)? A comparative sub-lethal indirect Age-Stage, Two-Sex life Tables laboratory bioassay
- M. Rizwan**, B. Atta, A.M. Sabir, 2020. An annotated list of rice planthoppers with new records of alternate hosts from Kallar Tract, Punjab, Pakistan. International Journal of Agriculture and Biology.
- M. Rizwan**, B. Atta, M. Rizwan, A.M. Sabir, 2019. Comparative insecticidal activity of seven common medicinal plant materials against *Tribolium castaneum* (Herbst) (Coleoptera: Tenebrionidae) on wheat and rice. Journal of Medicinal & Spice Plants.
- M. Rizwan**, B. Atta, A. Nasiba, M. Rizwan, A.M. Sabir, 2019. Infestation of *Sitophilus oryzae* (Coleoptera: Curculionidae) to rice varieties and its impact on nutritional composition. Sarhad Journal of Agriculture.
- M. Rizwan**, B. Atta, M. Rizwan, A. M. Sabir, U. B. Khalid and M. Sabar, 2019. On-Farm Evaluation of Different Storage Materials for the Management of Four stored grain insect pests on stored wheat. **Gesunde Pflanzen**
- Rizwan M**, Atta B, Rizwan M, AM Sabir, 2019. Evaluation of Hermetic storage bag under different conditions against biotic and abiotic stresses. **Food Control**
- Rizwan M**, Atta B, Rizwan M, Sabir AM, 2019. Silicon may play an effective role for Rice Leaf folder (*Cnaphalocrocis medinalis* Guenee) management. **Gesunde Pflanzen**
- Under Review Process:**
- Rizwan M, Atta M, Lenicov AMMR, **Rizwan M**, Sabir AM, Khalid UB, Iqbal S, Riaz A, Waqel K, 2019. Rice planthoppers: Problem in Pakistan. International Journal of Agriculture and Biology
- B- Published**
- Atta, B., **M. Rizwan**, A.M. Sabir, M.A. Ayub, M.F. Akhtar, M.B. Ayub, S. Nadeem, 2019. Comparative incidence and abundance of aphids and their associated predators on canola in Pakistan. Pakistan Entomologist. 41(2): 174-152.
 - Bilal A, **Rizwan M**, Sabir AM, Gogi MD, Farooq MA, Batta YA, 2019. Efficacy of entomopathogenic fungi against Brown planthopper *Nilaparvata lugens* (Stål) (Homoptera: Delphacidae) under controlled conditions. Gesunde Pflanzen. <https://doi.org/10.1007/s10343-019-00490-6>
 - Bilal A, **Rizwan M**, Sabir AM, Gogi MD, Ali K, 2019. Damage potential of *Tribolium castaneum* (Herbst) (Coleoptera: Tenebrionidae) on wheat grains stored in hermetic and non-hermetic storage bags. International Journal of Tropical Insect Science. <https://doi.org/10.1007/s42690-019-00047-0>
 - Atta, B., **M. Rizwan**, A. M. Sabir, M. D. Gogi, and M. Ayub, 2019. Silicon mediated induced resistance in plants for the management of agricultural insect pests: a review. World Journal of Biology and Biotechnology, 4(1):19-28.
 - Rizwan, M.**, B. Atta, M. Rizwan, A. M. Sabir, Z. U. Shah and M. Hussain, 2019. Effect of the entomopathogenic fungus, *Beauveria bassiana*, combined with diatomaceous earth on the red flour beetle, *Tribolium castaneum* (Herbst) (Tenebrionidae: Coleoptera). Egyptian Journal of Biological Pest Control, 29:27.
 - Rizwan, M.**, B. Atta, M. Yaqub, A. M. Sabir and A. Qadir, 2019. Evaluation of the entomopathogenic fungi as a non-traditional control of the Rice leaf roller, *Cnaphalocrocis medinalis* (Guenee) (Lepidoptera: Pyralidae) under controlled conditions. Egyptian Journal of Biological Pest Control.
 - S. Ahmar, N. Liaqat, M. Hussain, M. A. Salim, M. A. Shabbir, M. Y. Ali, H. A. Noushahi, M. Bilal, B. Atta and **M. Rizwan**, 2019. Effect of Abiotic Stresses on Brassica Species and Role of Transgenic Breeding for Adaptation. Asian Journal of Research in Crop Science. 3 (1): 1-10.
 - M. Bilal, M. Hussain, M. Umer, N. Ejaz, H. A. Noushahi, B. Atta and **M. Rizwan**, 2019. Population Incidence and Efficacy of Chemical Control against Rice Leaf folder (*Cnaphalocrocis medinalis* Guenee) (Pyralidae: Lepidoptera). Asian Plant Research Journal. 2 (2):1-7.
 - H. A. Noushahi, M. Hussain, M. Bilal, M. A. Salim, F. Idrees, M. Jawad, **M. Rizwan**, B. Atta and K. Tanveer, 2019. Improving Phosphorus Use Efficiency by Agronomical and Genetic Means. World Journal of Agricultural Sciences 15 (2): 47-53.
 - M. Hussain, M. Yasir Ali, M. Umer, N. Ejaz, M. Bilal, M. A. Salim, H. A. Noushahi, B. Atta and **M. Rizwan**, 2018. Study of Paddy Stem Borers Population Dynamics and Influencing Environmental Factors through Light Trap. Asian Journal of Research in Crop Science. 2 (4):1-10.
 - Bilal, A., **M. Rizwan**, A.M. Sabir, M. Yaqub and M. Akhter, 2018. Field evaluation of rodenticides treated baits for the effective control of field rats in rice crop. World journal of Agricultural Sciences 14(5): 137-143.
 - K. Ali, M. Sagheer, M. U. Hasan, C. M. S. Hanif, S. Malik, **M. Rizwan** and A. Rashid, 2017.

Medicinal response of *Moringa olifera* and *Nicotiana tabacum* as repellent and toxicant against *Trogoderma granarium* and *Rhyzopertha dominica*. *Z. Arznei-Gewurzpfla* 22(3): 132-135.

Presentations in Scientific Congresses/ Conferences

1. Sabir, A. M., M. Akhter, Z. U. Shah, **M. Rizwan**, B. Atta, A. Qadir and M. Asghar, 2017. *Nilaparvata lugens* (Homoptera: Delphacidae): Potential threat to the sustainable rice production in the Punjab, Pakistan. 1st International Conference on Emerging trends in Zoology. Univ. Sargodha, Sargodha, Pak. Pp: 21.
2. Akhter, M., A. M. Sabir, Z. U. Shah, **M. Rizwan**, B. Atta, T. H. Awan and U. B. Khalid, 2017. Occurrence of planthoppers in core area of the Punjab, Pakistan. 1st International Conference on Emerging trends in Zoology. Univ. Sargodha, Sargodha, Pak. P: 42- 43.
3. Sabir, A. M., M. Akhter, A. Qadir, **M. Rizwan** and M. Asghar, 2017. *Trifolium alexandrinum*: A New Off- Season Host Record of Rice Planthoppers in Rice Growing Areas. 1st International Conference on Climate Change and Biodiversity (IC3B) in Cholistan Institute of Desert Studies (CIDS), The Islamia University of Bahawalpur Pakistan on May 2-4.
4. Sabir, A. M., **M. Rizwan**, M. Akhter, and K. Ali, 2017. A study of paddy stem borer population dynamics and its influence factors through light trap Pak. Nat. Confer. Challenges and Opportunities to boost agriculture in Changing Climate, College of Agriculture, BZU, Bahadur Sub- Campus, Layyah, Pakistan, Pp:68.
5. Sabir, A. M., M. Akhter, A. Qadir, **M. Rizwan** and M. Asghar, 2017. Spatial distribution of rice planthoppers in district Sheikhupura and Gujranwala in the Punjab, Pak. Nat. Confer. Challenges and Opportunities to boost agriculture in Changing Climate, College of Agriculture, BZU, Bahadur Sub- Campus, Layyah, Pakistan. Pp: 70.
6. **Rizwan, M.**, A. M., Sabir, C. M. S. Hanif and K. Ali, 2017. Associating environmental factors impact on leaf folder Populations using light catches. Pak. Nat. Confer. Challenges and Opportunities to boost agriculture in Changing Climate, College of Agriculture, BZU, Bahadur Sub- Campus, Layyah, Pakistan, Pp:90.
7. **Rizwan, M.**, M. Akhter, A. M., Sabir, K. Ali and M. Atif, 2017. Population incidence and chemical control of rice leaf folder. Pak. Nat. Confer. Challenges and Opportunities to boost agriculture in Changing Climate, College of Agriculture, BZU, Bahadur Sub- Campus, Layyah, Pakistan, Pp:91.
8. Sabir, A. M., M. Akhter, A. Qadir, **M. Rizwan** and M. Asghar, 2017. Menace of rice planthoppers in the Punjab, Pakistan. February 28- March 2, Abstr. PC- 60, pp: 372.
9. Sabir, A. M., M. Akhter, **M. Rizwan**, M. Ijaz and A. Qadir, 2016. Pest insects of rice crop in the Punjab, Pakistan. Intern. Conger. Entomol., 16-18 Dec., UAF, Pak., pp:35.
10. **Rizwan, M.**, A. M. Sabir, I. Haider, M. U. Hassan, M. Sagheer and K. Ali, 2015. Evaluation of insecticidal potential of *Eucalyptus camaldulensis* and *Melia azedarach* against red rust flour beetle (*Tribolium castaneum* Herbst). 35th Pakistan Congress of Zoology. UK, Karachi, Pak., March 1-4. Abstr. PC- 16, pp: 88.
11. Haider, I., A. M. Sabir, M. Akhter and **M. Rizwan**, 2015. Effectiveness of insecticides for the control of whitebacked planthopper (*Sogatella furcifera* Horvath) under field conditions in the Punjab, Pakistan. 35th Pakistan Congress of Zoology. UK, Karachi, Pak., March 1- 4. Abstr. PC- 34, pp: 98.
12. Haider, I., A. M. Sabir, **M. Rizwan**, M. Kamran and M. Akhter, 2014. Scenario of dengue eradication programme in Tehsil Ferozswala, District Sheikhupura: A new approach. 34 Pakistan Congress of Zoology. BZU, Multan, Pak., February 25- 27. Abstr. CBGP- 80, pp: 51.
13. Sabir, A. M., M. Akhter, A. Qadir, I. Haider, **M. Rizwan** and S. Zia, 2014. Feeding Behaviour of Leaf folder (*Cnaphlocrosis medinalis* Gn.) and rice germplasm preference. 34th Pakistan Congress of Zoology. BZU, Multan, Pak., February 25- 27. Abstr. PC- 15, pp: 132- 133.
14. Haider, I., A. Suhail, A. M. Sabir and **M. Rizwan**, 2013. Predatory efficacy of different larval instars of *Chrysoperla carnea* (Steph.) on cotton jassid (*Amrasca devastans* Dist.) in laboratory conditions. Agriculture in Arid Environment: Food security in Arid Environment. BZU, Bahadur Sub-Campus, Layyah, Pak., March 25- 26. p: 39- 40.
15. **Rizwan, M.**, M. Hassan, M. Sagheer, A. M. Sabir and I. Haider, 2013. Insecticidal activity of acetone extracts of *Eucalyptus camaldulensis* and *Melia azedarach* against *Tribolium castaneum* (Herbst). Agriculture in Arid Environment: Food security in Arid Environment. BZU, Bahadur Sub-Campus, Layyah, Pak., March 25- 26. pp: 40.
16. Sabir, A. M., M. Akhter, I. Haider and **M. Rizwan**, 2013. Integrated pest management of rice (*Oryza sativa* L.) crop in the Punjab, Pakistan. Agriculture in Arid Environment: Food security in Arid Environment. BZU, Bahadur Sub- Campus, Layyah, Pak., March 25- 26. pp: 41.
17. Sabir, A. M., M. Akhter, I. Haider, **M. Rizwan** and A. Qadir, 2013. Evaluation of rice germplasm against stem borers and leaf folder in the Punjab, Pakistan. International Seminar on Entomological Challenges in Pakistan and their Sustainable Management. March 23, Entomol. Res. Inst., AARI, Faisalabad, Pak. Pp: 23.
18. Sabir, A. M., M. Akhter, I. Haider, **M. Rizwan** and A. Qadir, 2013. Field Evaluation of Rice Germplasm on the Basis of Feeding Behaviour of Leaf folder (*Cnaphloeris medinalis* Gn.). Intern. Confer. Crop Management in Changing Climate" February 11-13, Univ. Agric., Faisalabad,

Pakistan.Pp: 167.

**Informatory Pamphlets/ Popular
articles**

M. Rizwan, A. M. Sabir and M. Akhter, 2015. Dhaan k zarar rasan kearay, bemaryan aur unka marboot insdaad (insect pests and diseases of rice crop and their management). Zirat Nama 54(13): 6-10.