### Curriculum Vitae

Dr. Muhammad Arshad JAVED
Institute of Agricultural Sciences,
University of the Punjab, Lahore
Pakistan



### 1.0 Personal Information

Religion: Islam Nationality: Pakistan

 Date of Birth:
 February 13, 1968

 CNIC:
 35201-4806681-7

 Passport No:
 CC8676813

Language: Punjabi: Native Urdu: National English: Business Japanese: Conversational

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## 2.0 Education profile

Degree/Certificate (Area of study)	Year	University/College/School
• PhD (Biological Resources Utilization)	2006	Kobe University, Kobe, <b>Japan</b>
• Master of Agriculture (Plant Resource Science)	2003	Kobe University, Kobe, <b>Japan</b>
<ul> <li>MSc (HONS.) (Plant Breeding and Genetics)</li> </ul>	1994	University of Agriculture, Faisalabad, Pakistan.
BSc (HONS.) (Agriculture)	1992	University of Agriculture, Faisalabad, Pakistan.
• FSc (Pre-Medical)	1986	Government College, Lahore, Pakistan
• Matric (Science)	1984	Govt. High School # 1, Shahkot, District
		Nankana Sahib, Punjab, <b>Pakistan</b>

## 3.0 Professional Experience

From ~ to	Position	Organization/ institute
May 2019 ~ to date	Professor	Institute of Agricultural Sciences, University of the Punjab, Lahore, Pakistan.
Feb 2011 ~ May 2019	Senior Lecturer	Dept of Biosciences, Faculty of Science, Universiti Teknologi Malaysia (UTM), <b>Malaysia</b>
Feb 2007 ~ Feb 2010	Assistant Professor	School of Biological Sciences, Quaid-i-Azam campus, University of the Punjab, Lahore, <b>Pakistan</b>
Sep 2000 ~ Sep 2006	Research student and PhD scholar	Graduate School of Science and Technology, Kobe University, Kobe, <b>Japan</b>
Sep 1993 ~Sep 2002	Research Officer	Soil Salinity Research Institute, Pindi Bhattain, Government of The Punjab, <b>Pakistan</b>

## 4.0 Research and Publications

## 4.1 Research interests

Plant sciences, Agriculture, Plant Breeding & Genetics, QTL analysis, Plant Tissue Culture (Haploidy breeding), Abiotic and biotic stresses

### 4.2 Research grants

No	Grant Title	Year	Amount	Agency
1.	Gapless genome finishing using bioinformatics- assemblers and bridges with dual-hybrid sequencings	2016-18	Malaysian Ringgit 50000	Government of Malaysia
2.	Regenerated NPK organo-Zeolite as repeated controlled release fertilizer for Mulberry plant	2016-18	Malaysian Ringgit 50000	Government of Malaysia
3	Explore the potential of Capsicum genetic resources based on taxonomic descriptors, productivity traits and molecular analysis under tropical environment	2014-16	Malaysian Ringgit 45000	Government of Malaysia
4.	Symbiotic Cube Cultivation System for Sustainable Farming (PRGS)	2014-16	Malaysian Ringgit 150000	Government of Malaysia
5.	Genome profiling of Malaysian rice to distinguish and differentiate the cultivars at molecular level	2012-14	Malaysian Ringgit 50000	Government of Malaysia
6.	Flagship Research Project: Bio-fortification of food crops for enhanced food security	2013-16	Malaysian Ringgit 450000	Government of Malaysia
7.	Assessing the salinity tolerance potential and molecular characterization of $F_1$ doubled haploid lines in <i>indica</i> rice ( <i>Oryza sativa</i> L.)	2011-12	Malaysian Ringgit 30000	Government of Malaysia
8.	Molecular mapping of quantitative trait loci determining salinity tolerance at maturity stage in <i>indica</i> rice	2009-12	Pakistan Rupee 23000000	Government of Punjab, Pakistan
9.	Development of production technology and its testing at farmer field	1997-99	Pakistan Rupee 1500000	Government of Punjab, Pakistan

## 4.3 Publication in ISI journals

Year	Title	Reference
2019	Efficacy and Cost of Green Fungicide formulated from	Environmental Science and
	Crude Beta-glucosidase	Technology.DOI: 10.1007/s1376 2-018-2084-1
2018	Efficacy and Cost of Green Fungicide formulated from Crude βeta-glucosidase	Bioscience journal. 34(4), 830- 847
2018	Rapid Detection of Nutrients in "Zea mays L" using Inductively Coupled Plasma Mass Spectrometry	Romanian Biotechnological Letters 23(2):13394-13400

2017	A comparative study of the inorganic nutrients in different types of Zea mays L. using inductively coupled plasma mass	J Ani Plant Sci 27(4): 1315-1320
	spectrometry	
2017	Comparative study of physiological and growth parameters for sodium and iron toxicities in upland and lowland cultivars of <i>Oryza sativa</i> L.	Pak J Botany 49(SI): 249-254
2017	Comparative study for the determination of nutritional composition in commercial and noncommercial maize flours	Pak J Botany 49(2): 519-523
2017	Evaluation of Antioxidant Activity and Total Polyphenols Content on Upland Rice	J. Nat. Prod. Plant Resources. 7(2): 1-6
2016	Screening of previously reported microsatellite markers, associated with panicle characteristics, for marker assisted selection in Malaysian Rice (Oryza sativa L.)	J Ani Plant Sci 26(4): 1117-1123
2016	Green Tropical Phytoextracts-Promising Anticancer Alternative.	Braz. Arch. Biol. Tech, 59, p.e16160062
2016	Evaluation of Trichoderma isolates as potential biological control agent against soybean charcoal rot disease caused by Macrophomina phaseolina.	Biotech & Biotech Equipment, 30(3): 479-488.
2016	A plant transformation vector containing the gene dehD for the development of cultivars resistant to monochloroacetic acid.	J Ani Plant Sci 26(4):01-13
2014	Measurements of natural radionuclides in vegetables by gamma spectrometry	Journal of Applied Spectroscopy 81(3):488-492
2014	Germination, seedling growth, amylase and protease activities in Malaysian upland rice seed under microbial inoculation condition	J Pure Applied Microbiology. 8(4): 2627-2635
2013	Herbicide tolerance genes derived from bacteria	J Animal Plant Sciences 23 (1): 85-91.
2013	Construction of microsatellite linkage map and detection of segregation distortion in <i>indica</i> rice (Oryza sativa L.).	Pak J Bot. 45(6): 2085-2092
2012	Isolation and sequence analysis of cotton infecting begomoviruses	Pak. J. Bot., 44: 223-230
2011	Requirement of pro-peptide in proper folding of Subtilisin-link serine protease TK0076.	Pak J Bot 43(4):2059-2065
2011	Identification of two sugarcane mosaic virus (SCMV) variants from naturally infected sugarcane crop in Pakistan	Pak J Bot 43(2):1157-1162
2010	Crystallization of fructose 1,6-bisphosphatase from the hyperthermophilic archaeon <i>Thermococcus kodakaraensis</i> .	Pak J Bot, 42(4) 2313-2316.
2007	The role of culture temperatures and maltose in enhancing the anther culture efficiency of salt tolerant <i>indica</i> rice ( <i>Oryza sativa</i> L.) cultivars, Pokkali and Nona Bokra.	Pl Biotech: 24:283-287
2004	Genetic analysis of quantitative traits in rice ( <i>Oryza sativa</i> L.) exposed to salinity.	Aus J Agric Res. 55 (11): 1173- 1181
Four r	research papers in Impact Factor Journals (Higher Education	on Commission of Pakistan arants

Four research papers in Impact Factor Journals (Higher Education Commission of Pakistan grants four impact factor publications to a plant breeder if his/her crop variety is approved for general cultivation by Government of Pakistan). Notification attached

# 4.4 Publication in Scopus/web of Science/peer review international journals/proceedings

Year	Title	Reference
2018	Development of Novel Protocol to Al³+ Stress Tolerance at Germination Stage in Indica Rice through Statistical Approaches	The Scientific World Journal Page 1-7.
2018	Improving the growth of Centella asiatica using surfactant modified natural zeolite loaded with NPK nutrients	Asian J Agri and Bio 6(1):55-65
2016	Seed germination analysis in germplasm of Capsicum annum	Malaysian J Fundamental and Applied Sci 12(3):102-104
2016	Effect of ferrous toxicity on seedling traits and ion distribution pattern in upland and low land rice under hydroponic conditions.	Jurnal Teknologi 78(1-2): 39-43
2016	Determination of proximate chemical composition and detection of inorganic nutrients in maize (Zea mays L.).	Materials Today Proceedings 3(2):715-718.
2016	A short review on the development of salt tolerant cultivars in rice	International Journal of Public Health Science (IJPHS) 5(2): 201- 212
2016	Biological screening of a medicinal plant acropitilon repens.	IGCESH2016 proceedings 485-487
2016	Correlations studies for growth and physiological parameters in upland and lowland rice varieties.	ISPS Proceedings 4:529-535.
2016	Response of Germination Attributes to Salinity Toxicity in indica Rice (Oryza sativa L.).	ISPS Proceedings 4:536-541
2016	Relationship between germination traits in Capsicum annuum.	ISPS Proceedings 4:551-554
2016	Varietal response to ferrous toxicity at germination stage in rice.	ISPS Proceedings 4:565-568.
2016 2015	Variation of germination traits in capsicum germplasm Evaluation of N6 medium modification, plant growth regulators, carbon sources on in vitro seed germination and callogenesis in tomato ( <i>Lycopersicon esculentum Mill C.V. King Stone</i> )	ICBWI Proceedings HW8: 28-31 GMP Review Vol 16(4):97-102
2014	Microbial effects on seed germination in Malaysian rice (Oryza sativa L.).	APAN 37:41-52
2013	RAPD and protein analyses revealed polymorphism in mutated potato cultivars	Jurnal Teknologi 64(2):15-19
2013	A non-mercuric shoots bud sterilization technique for Boesenbergia rotunda (L.) Mansf. Kulturpfl.	Jurnal Teknologi 64(2): 21-24
2012	Development and comparative studies of double cross tomato hybrids.	African J Agri Res. 7(37): 5259- 5264
2012	Molecular characterization of capsid protein gene of potato virus X from Pakistan.	African J Biotech 11(74): 13854- 13857
2012	Studies to investigate the interactions of genotypes, culture media and culture temperatures on androgenesis in recalcitrant <i>indica</i> rice ( <i>Oryza Sativa</i> L.).	Jurnal Teknologi. 58: 71-75

2011	Identification of QTLs for morph-Physiological traits	Procedia Environ Sci. 8:389 - 395
	related to salinity tolerance at seedling stage in i <i>ndica r</i> ice.	
2010	Strategies to Control Potato Virus Y Under In	Pak J Phytopath 22 (1) :63-70
	Vitro Conditions	
2010	In-Vitro induction of mutation in potato cultivars.	Pak J Phytopath 22(1):51-57
2007	Effectiveness of alternate culture temperatures and maltose	African Crop Sci Conf Proc
	in the anther culture of salt tolerant <i>indica</i> rice cultivars.	8: 553-557
2007	Vinca minor; another host of a tomato infecting begomovirus	African Crop Sci Conf Proc
	in Pakistan.	8: 905 - 907
2006	Discrepancy of two ecotypes of Oryza sativa L. to salinity at	Annl Bio : 22(2):201-211
	germination and seedling stages.	
2003	Salinity tolerance of three Basmati rice lines: a comparative	Kinki J Crop Sci Breed 48: 7-12
	study of yield related characters.	·
2001	Salt tolerant potential of some selected fine rice cultivars.	J Bio Sci. 1(12): 1175-1177
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#### 4.5 Book Editor

- Research trends in crop plants (ISBN 978-983-52-1558-2)
   Published in Malaysia by PENERBIT UTM PRESS Universiti Teknologi Malaysia, 81310 UTM Johor Bahru, Johor Darul Ta'zim, MALAYSIA
- Crop plants and abiotic toxicities (ISBN 978-983-52-1562-9)
   Published in Malaysia by PENERBIT UTM PRESS Universiti Teknologi Malaysia, 81310 UTM Johor Bahru, Johor Darul Ta'zim, MALAYSIA

### 4.6 Book Chapters

No.	Title	Reference
1.	Microsatellites Markers and Plant improvement	Chapter 1. Page 1-20. Research Trends in Crop Plants (ISBN 978-983-52-1558-2)
2.	Strategies to Manage the Bacterial Blight Disease in Rice	Chapter 2. Page 21-36. Research Trends in Crop Plants (ISBN 978-983-52-1558-2)
3.	Heavy metals toxicity in rice crop cultivation	Chapter 1. Page 1-18. Crop Plants and Abiotic Toxicities (ISBN 978-983-52-1562-9)
4.	Plants survivability against salt stress	Chapter 3. Page 55-72. Crop Plants and Abiotic Toxicities (ISBN 978-983-52-1562-9)
5.	Lead toxicity: physiological biochemical and ultrastructural in plants	Chapter 6. Page 101-112. Crop Plants and Abiotic Toxicities (ISBN 978-983-52-1562-9)
6.	Relationship between Soil Properties and Contamination of Charcoal Rot Disease in Soybean Fields	Chapter 5. Page 75-96. Plant Science and Its Applications (ISBN 978-983-52-1573-5)

## 5.0 Research supervision (Post Graduate Thesis) (PhD:4, MS: 24)

## 5.1 Doctor of philosophy (PhD)

No.	Student name	Dissertation title
1.	Nusrat Jahan	Genetic dissection for tolerance to heavy metals toxicity at seed germination
		stage in indica rice (Oryza sativa L.)

Samiullah Khan Identification of Quantitative Trait Loci linked with tolerance to saline-alkaline stress at germination stage in indica rice (Oryza Sativa L.)
 Shaista Qamar Determination of salinity effects on nutritional composition in diverse germplasm of Zea mays L.
 Elham Khalili Utilization of beta-glucosidase from Trichoderma harzianum as Fungicide against Macrophomina phaseolina that Causes Charcoal Rot

#### 5.2 MS

No.	Student Name	Title of dissertation
1.	Zulaikha Binti Sarobo	Profiling the Diversity of Morphological Traits for Future Malaysian Breeding Programme in Capsicum Genetic Resources
2.	Siti Atiqah Binti Zainul Alam	Association Mapping for Seed Germination Traits under Salinity Stress in Elite Rice Germplasms (Oryza sativa L.)
3.	Siti Farah Binti Abu Kassim	Association mapping for tolerance to ferrous toxicity at
4	Zulaikha Binti Sarobo	germination stage in rice germplasm (Oryza sativa). Profiling and genetic diversity in Capsicum Genetic Resources
5.	Alexander Ray A/L Rayiappan	The distribution pattern of heavy metal ions and its effects on agronomic traits in capsicum
6.	Norfarah Syuhaidah Binti Mohd Noor	Regeneration study of NPK-organo-Zeolite as repeated controlled released fertilizer for white Mulberry
7.	Noor Asyraf Bin Noor Azman	Improving the growth of Centella asiatica using modified natural Zeolite
8.	Nur Shuhadah Binti Mohd Saad	Assessing molecular genetic diversity in indica rice
9.	Tan Ee Yau	Molecular characterization of Malaysian rice germplasm for bacterial blight
10.	Mohammad Redhuan bin Mohammad Noor	Optimization of an efficient DNA protocol for marker assisted selection in rice.
11.	Azin Fouladvan	Development of DNA extraction protocol for segregating breeding populations in rice (Oryza sativa L.)
12.	Maral Biroudian	Detection of microsatellite polymorphism in Malaysian cultivated rice.
13.	Ahmad Fakhrurrazi Bin Yahaya	Screening of Quantitative Trait Loci by using Microsatellite Markers associated with yield related traits in Malaysian rice cultivars
14.	Muhamad Elias Alamin Bin Kamuludin	Fingerprinting analysis of Malaysian pineapple cultivars based on ITS-RAPD method
15.	Zakariya Yahya Thanoon	Effects of plants growth regulator, carbon sources and culture conditions on callus induction in Mentha spicata.
16.	Mohamud Adow	Investigation regarding the effectiveness of nitrogen sources and concentration on Tomato (Lycopersicon esculentum) characteristics

17.	Mohamed Marjan Najafi Disfani	The effects of medium modifications on in vitro seed germination and callus induction in tomato
18.	Rebaz Abdul Wahab Baqr	Studies to investigate the effects of nitrogen sources on androgenises and carbon sources on shoot regeneration of aromatic and non-aromatic types in Indica rice (Oryza sativa L.)
19.	Kosar Ali Omer	The survival of Human prostate carcinoma cell line (DU145) in presence of Ficus deltoidea and Labisia pumila aqueous extracts
20.	Hazhar Muhammad Hamad Ameen	Studies to investigate the effect of plant growth regulators, carbon sources and media modification in vitro seed germination and callogenesis in tomato.
21.	Bahareh Derakhshandeh	The molecular characterization of Malaysian rice germplasm.
22.	Nurhaziqah Binti Supari	Screening of Quantitative Trait Loci for panicle productivity in Malaysian rice (Oryza sativa L.)
23.	Nurliyana Binti Mohamad	Molecular analysis of Malaysian rice germplasm for grain traits
24.	Siti Zanariyah Binti Ali	Molecular analysis of Malaysian rice germplasm for plant productivity

# 6.0 Conference presentation

## 6.1 Invited/ Keynote speaker in International conferences

No.	Title of talk	Conference reference
1.	Agriculture and climate change.	6 <sup>th</sup> International of Pakistan Phytopathological Society of on Plant health for Sustainable Agriculture, A focused approach for food security under climate change. November 20-22, 2017. Bahaudin Zikariya University, Multan, Pakistan.
2.	Assessing the genetic potential for Bacterial blight in Malaysian rice.	International conference on tackling climate change through plant breeding. November 13-15, 2017. PMAS Arid Agricultural University, Rawalpindi, Pakistan.
3.	Potassium and other nutrient use efficiency in plants	International Conference on Significant Potash Use In Pakistani Agriculture. November 24-25, 2016. Institute of Agricultural Sciences, University of the Punjab, Lahore, Pakistan.
4.	Climate change, agriculture and rice production.	5 <sup>th</sup> International and 10 <sup>th</sup> National Conference of Pakistan Phytopathological Society on Crop Protection for Sustainable Agriculture. November 23-25, 2015. Institute of Agricultural Sciences, University of the Punjab, Lahore, Pakistan
5.	Horizontal and vertical approaches towards tolerance to biotic and abiotic stresses in plants.	International Conference on Stress Biology and Biotechnology, Challenges and management May 21-23, 2014. Institute of Agricultural Sciences, University of the Punjab, Lahore, Pakistan.

### 6.2 Oral presentation

1. Javed Muhammad Arshad. 2017. Agriculture and climate change. International conference on tackling climate change through plant breeding. November 13-15, **2017**. PMAS Arid Agricultural University, Rawalpindi, **Pakistan**.

- 2. Javed, Muhammad Arshad. 2017. Assessing the genetic potential for Bacterial blight in Malaysian rice. 6<sup>th</sup> International of Pakistan Phytopathological Society of on Plant health for Sustainable Agriculture, A focused approach for food security under climate change. November 20-22, 2017. Bahaudin Zikariya University, Multan, Pakistan.
- 3. Noor Asyraf Noor Azman, Nik Ahmad Nizam Nik Malek, Norfarah Syuhaidah Mohd Noor, Muhammad Arshad Javed, Niza Syafiqah Hamzah and Noor Hidayah Zulkifli. 2017. Improving the Growth of Centella asiatica Using Surfactant Modified Natural Zeolite Loaded with NPK Nutrients. International conference on agriculture Extension (AGREX'17) "Empowering knowledge to communities, enhancing food security". February 14-16, 2017. Universiti Teknologi Malaysia, 43400 UPM Serdang, Selangor, Malaysia.
- 4. Norfarah Syuhaidah Mohd Noor, Nik Ahmad Nizam Nik Malek, Noor Asyraf Noor Azman, Muhamad Javed Arshad, Niza Syafiqah Hamzah, Noor Hidayah Dzkulfli. 2017. Effects of Bag Slow Release Fertilizer Containing NPK-Organo-Zeolite on the Growth of Morus alba. International conference on agriculture Extension (AGREX'17) "Empowering knowledge to communities, enhancing food security". February 14-16, 2017. Universiti Teknologi Malaysia, 43400 UPM Serdang, Selangor, Malaysia.
- 5. Javed Muhammad Arshad. **2016**. Potassium and other nutrient use efficiency in plants. International Conference on Significant Potash Use In Pakistani Agriculture. November 24-25, 2016. Institute of Agricultural Sciences, University of the Punjab, Lahore, **Pakistan**.
- 6. Alexander Ray Rayiappan, Muhammad Arshad Javed. **2016**. The accumulation patterns of metal ions in diverse Capsicum Annum varieties. International Conference on Biosciences and Medical Engineering (ICBME2016). November 10-11, 2016. UTM Johor Bahru, **Malaysia**.
- 7. Siti Atiqah Zainul Alam, Muhammad Arshad Javed. **2016**. Stress in plants: regulation, mechanism effects and approaches to promote survival. International Conference on Biosciences and Medical Engineering (ICBME2016). November 10-11, 2016. UTM Johor Bahru, **Malaysia**.
- 8. Siti Farah Abu Kasim, Muhammad Arshad Javed. **2016**. Responses germination attributes to farrous toxicity in rice (*Oryza sativa* L.). International Conference on Biosciences and Medical Engineering (ICBME2016). November 10-11, 2016. UTM Johor Bahru, **Malaysia**.
- 9. Nusrat Jahan, Muhammad Arshad Javed. **2016**. Estimation of Cd toxicological effects on two indica rice at germination satge. International Conference on Biosciences and Medical Engineering (ICBME2016). November 10-11, 2016. UTM Johor Bahru, **Malaysia**.
- 10. Samiullah Khan, Muhammad Arshad Javed. **2016**. Correlation studies for germination and growth traits in rice germplasm. International Conference on Biosciences and Medical Engineering (ICBME2016). November 10-11, 2016. UTM Johor Bahru, **Malaysia**.
- Ee Tau Tan, Muhammad Arshad Javed. 2016. Strategies to manage bacterial blight disease in rice. International Conference on Biosciences and Medical Engineering (ICBME2016). November 10-11, 2016. UTM Johor Bahru, Malaysia.
- 12. Zulaikha Sarobo, Muhammad Arshad Javed, Mohamad Roji Sarmidi and Alexander Ray. **2016**. Variation of germination traits in capsicum germplasm. 6th International Conference on Biotechnology for the Wellness Industry 2016, August 16-17, 2016. Melaka, **Malaysia**.

- 13. Nusrat Jahan, Muhammad Arshad Javed, Mudassir Israr Zaidi. **2016**. Biological screening of a medicinal plant *acropitilon repens*. International Graduate Conference on Engineering, Science and Humanities (IGCESH2016), August 15-17, 2016. Johor Bahru, **Malaysia**.
- 14. Ray, A., Ika, N., and Javed, M.A. 2016. Effects of heavy metals on productivity in Capsicum annum. Regional Annual Fundamental Science Symposium 2016 (*RAFSS2016*). May 18-20, 2016. Kuala Lumpur, Malaysia.
- 15. Siti Atiqah, Z. A., Samiullah, K. and Javed, M. A. **2016**. Performance of *indica* Rice (*Oryza sativa L.*) at Germination Stage in Response to Sodium Toxicity. Regional Annual Fundamental Science Symposium 2016 (*RAFSS2016*). May 18-20, 2016. Kuala Lumpur, **Malaysia**.
- 16. Farah, S., A., K., and Javed, M., A. **2016**. Varietal response to ferrous toxicity at germination stage in rice (Oryza sativa L). Regional Annual Fundamental Science Symposium 2016 (*RAFSS2016*). May 18-20, 2016. Kuala Lumpur, **Malaysia**.
- 17. Samilullah Khan, Muhammad Arshad Javed and Mohd Redhuan 2016. Rice seedling age is critical for dna quality and quantity for marker assisted selection. Regional Annual Fundamental Science Symposium 2016 (RAFSS2016). May 18-20, 2016. Kuala Lumpur, Malaysia.
- 18. Ray, A., Javed, M.A., and Sarobo, Z. 2016. Seed germination analysis in germplasm of Capsicum annuum. Regional Annual Fundamental Science Symposium 2016 (RAFSS2016). May 18-20, 2016. Kuala Lumpur, Malaysia.
- 19. Siti Atiqah, Z. A., Samiullah, K. and Javed, M. A. **2016**. Response of Germination Attributes to Salinity Toxicity in *indica* Rice (*Oryza sativa* L.). 4<sup>th</sup> International Science Postgraduate Conference 2016. February 22-24, 2016. Skudai, **Malaysia**.
- 20. Ray, A., Javed, M.A., and Sarobo,. Z, (2016). Relationship between germination traits in Capsicum annuum. 4<sup>th</sup> International Science Postgraduate Conference 2016. February 22-24, 2016. Skudai, Malaysia.
- 21. Farah, S., A., K., Javed, M., A., and Nusrat, J., (2016). Varietal response to ferrous toxicity at germination stage in rice. 4<sup>th</sup> International Science Postgraduate Conference 2016. February 22-24, 2016. Skudai, Malaysia.
- 22. Samiullah K., Siti Atiqah, Z. A., Nur Syifaaiyah, A. A., Nusrat J. and Javed, M. A. (2016). Correlations studies for growth and physiological parameters in upland and lowland rice varieties. 4<sup>th</sup> International Science Postgraduate Conference 2016. February 22-24, 2016. Skudai, Malaysia.
- 23. Nusrat Jahan, Muhammad Arshad Javed, Mudassir Israr Zaidi, Samiullah Khan. **2016**. Comparative study of physiological and growth parameters for sodium and iron toxicities in upland and lowland rice cultivars. Climate change and phytodiversity. 4<sup>th</sup> national & 5<sup>th</sup> international conference of Botany 2016, January 15-18, 2016. Karachi, **Pakistan**.
- 24. Muhammad Arshad Javed and Nik Ahmad Nizam Nik Malek 2015. Climate change, agriculture and rice production. 5<sup>th</sup> International and 10<sup>th</sup> National Conference of Phytopathological Society of Pakistan on Crop Protection for Sustainable Agriculture. November 23-25, 2015. Lahore, **Pakistan**
- 25. Elham Khalili, Muhammad Arshad Javed, Roswanira Abd Wahab... **2015**. *Trichoderma harzianum*: A potential biocontrol agent for soybean charcoal rot disease. The 2<sup>nd</sup> International conference on Green Chemical engineering Technology (GCET 2015). 24-25 November 2015. Melaka **Malaysia**.

- 26. Nusrat Jahan, Norshila Fauzi, Muhammad Arshad Javed, Samiullah Khan, Siti Zulaiha. **2015**. Effect of ferrous toxicity on seedling traits and ion distribution pattern in upland and low land rice under hydroponic conditions. Pawees-Inwepf Joint International Conference. August 19-21, 2015. Kuala Lumpur, **Malaysia**.
- 27. Muhammad Arshad Javed. 2014. Horizontal and vertical approaches towards tolerance to biotic and abiotic stresses in plants. Invited speaker talk. International conference on stress biology and biotechnology: Challenges and management. May 21-23, 2014. Institute of Agri Sciences, University of the Punjab, Lahore, Pakistan.
- 28. Muhammad Arshad Javed, and Mohamad Roji Bin Sarmidi. **2014**. Selection of appropriate strategies to surmount the effects of abiotic stresses in crop plants. 2<sup>nd</sup> International Plant Breeding Seminar by Genetics Society of Malaysia. October 14-15, 2014. Universiti Putra Malaysia, Serdang, Selengore, Malaysia.
- 29. Nusrat Jahan, Muhammad Arshad Javed, and Samiullah khan. **2014**. An overview of heavy metals toxicities on crop seed germination. 2<sup>nd</sup> International Plant Breeding Seminar by Genetics Society of Malaysia. October 14-15, 2014. Universiti Putra Malaysia, Serdang, Selengore, **Malaysia**.
- 30. Samiullah khan, Muhammad Arshad Javed, and Nusrat Jahan. 2014. Quantitative trait loci associated with salinity tolerance in rice: Recent development. 2<sup>nd</sup> International Plant Breeding Seminar by Genetics Society of Malaysia. October 14-15, 2014. Universiti Putra Malaysia, Serdang, Selengore, Malaysia.
- 31. Abd Rahman Jabir Mohd, NurHaziqah Supari, Muhammad Arshad Javed... 2014. Influence on microbial inoculation on seedling vigour and enzyme activity in Malaysian upland rice. 5<sup>th</sup> International Conference on Biotechnology for the Wellness Industry "Wellness for Health and Productivity: New Trend and Opportunities". June 10-11, 2014. Kuala Lumpur, Malaysia.
- 32. NurHaziqah Supari, Hanapi SZ, Muhammad Arshad Javed... 2014. Response of traditional upland rice to different fertilizers. 5<sup>th</sup> International Conference on Biotechnology for the Wellness Industry "Wellness for Health and Productivity: New Trend and Opportunities". June 10–11, 2014. Kuala Lumpur, Malaysia.
- 33. Bahareh Derakhshandeh, Muhammad Arshad Javed, Chew-Tin Lee, Siti Ailla Md Afendi and Fahrul Zaman Huyop. **2013**. Molecular Characterization of Malaysian rice Germplasm by Using Microsatellite Markers for Variety Identification. International Conference on Sustainable Environment and Agriculture IPCBEE vol.57 (2013) IACSIT Press, **Singapore** 57(18):92-96.
- 34. Rebaz Abdulwahab Baqr, Muhammad Arshad Javed, Karwan Talaat Mohammed. 2013. Studies to investigate the effects of nitrogen sources of media to androgenesis response of aromatic and non-aromatic cultivars in indica rice (Oryza Sativa L). 4<sup>th</sup> ICOWOBAS-RAFSS 2013, 3-5 September 2013. Johor Bahru, **Malaysia**,
- 35. Muhammad Arshad Javed, Azman Abd Samad, Ahmad Fakhrurrazi Yahaya, Nurhaziqah Supari. 2012. Generation of genetic variability and evaluation for sodium chloride tolerance through androgenesis in indica rice. 1st regional conference on agrobiodiversity conservation and sustainable utilization (rac-1) Langkawi, 25 27 September 2012. Malaysia
- 36. Muhammad Arshad Javed, Fahrul Zaman Huyop, Alina Wagiran & Faeza Mohd Salleh. 2011. Identification of QTLs for morph-physiological traits related to salinity tolerance at seedling stage in *indica* rice.

- International Conference on Environmental Sciences and Biotechnology ICESB 2011. November 25-26, 2011. Maldives.
- 37. Javed MA and T Ishii. 2009. Mapping the quantitative trait loci associated with salt tolerance at seedling stage in indica rice (Oryza sativa L.). In 14th Australasian Plant Breeding & 11th Society for Advancement in Breeding Research in Asia & Oceania Conference 2009, 10-14 August, 2009. Cairns, Australia.
- 38. Javed MA, S Misoo and T Mahmood 2008. Optimizing the culture protocol for haploid production in recalcitrant indica rice (Oryza sativa L.) In 2<sup>nd</sup> Int. Conference on Science and Technology, Dec. 12-13. Pinang, Malaysia. pp 115.
- 39. Javed MA, S Misoo, T mahmood, and MS Haider 2007. Effectiveness of alternate culture temperatuires and maltose in the anther culture of salt tolerant *indica* rice cultivars. African Crop Science Conference Proceeding Alminia **Egypt** Vol 8: 553-557
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- 45. Javed MA, G Shabbir, S Misoo, T Ishii and O Kamijima. 2002. Impact of successive salinity levels on the several characters at reproductive stage in Basmati/Fine rice. March 30-31. Tokyo. Breeding Research 4(1):527. ONLINE ISSN: 1348-1290 PRINT ISSN: 1344-7629 (Japan)
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## 7.0 Teaching Profile

### 7.1 Taught Courses

No	Title of the course	Level	Organization/Institute
1.	Biochemistry and Microbial Physiology	PG	Universiti Teknologi Malaysia
2.	Molecular mechanisms in gene expression and regulation	PG	Universiti Teknologi Malaysia
3.	Research Methodology	PG	Universiti Teknologi Malaysia

4.	Basic Genetics	UG	Universiti Teknologi Malaysia
5.	Gene expression	UG	Universiti Teknologi Malaysia
6.	Ecology	UG	Universiti Teknologi Malaysia
7.	Biological Control and Environmental conservation	UG	Universiti Teknologi Malaysia
8.	Virology	UG	Universiti Teknologi Malaysia
9.	Introduction to Biotechnology	UG	Universiti Teknologi Malaysia
10.	Cellular Biochemistry and Metabolism (Laboratory)	UG	Universiti Teknologi Malaysia
11.	General and medical genetics	P <i>G</i>	University of the Punjab
12.	Molecular biology	P <i>G</i>	University of the Punjab
13.	Advanced plant breeding and genetics	P <i>G</i>	University of the Punjab
14.	Host plant resistance	P <i>G</i>	University of the Punjab
15.	Plant breeding and genetics	UG	University of the Punjab
16.	Quantitative genetics	UG	University of the Punjab

### 7.2 Teaching awards

- Excellent Performance Award and cash prize (Citra Karishma)
- Best E-learning teacher award
- Award of Excellence (Active blended learning course)

#### 7.3 Academic trainings

No	Year	Title of training course	Organizer
1.	2017	Course assessment and CQI (Cont. Quality Improv.)	Universiti Teknologi Malaysia
2.	2015	OBE (Output Based Education): Constructive alignment concepts & implementation	Universiti Teknologi Malaysia
3.	2015	Basic E Learning @UTM	Universiti Teknologi Malaysia
4.	2013	E-Learning 2.3 Fundamental Course	Universiti Teknologi Malaysia
5.	2013	E -Learning Utilizing Quiz Effectively	Universiti Teknologi Malaysia
6.	2012	E -Learning Fundamental Course	Universiti Teknologi Malaysia
7.	2012	E -Learning Fundamental Course	Universiti Teknologi Malaysia
8.	2012	OBE Constructive alignment	Universiti Teknologi Malaysia
9.	2012	OBE Assessment and CQI course	Universiti Teknologi Malaysia

### 8.0 Additional duties/ administrative responsibilities

#### Ministry of Science and Technology, Government of Malaysia

Member of evaluation and monitoring panel of Biotech Research Project since the year 2012

- Felo of Residential Kolej UTM (April 2011 ~ April 2014)
  - Academic, personal and spiritual development of students
  - Exploring the personal potential of students as entrepreneurial and leadership
  - Look after the UTM student residential, educational, personal and emergency affairs at KOLEJ (hostel) level.

- Activities related to personality development of students. KJM camp, Motivation camp etc.
- Arranging Global Outreach Programs (GOP) for UTM students
- Strengthen the interaction of local (Malaysian) and International students of UTM
- JAPAN TAIKEN 2012 and UIE (you and I exchange) PROGRAM were successfully conducted as an ADVISOR
- UTM KOLEJ Fellow convention 2013
- Chairman FBME Postgraduate Handbook committee 2013
  - Coordination, assigning the task, compiling the data and documentation for all the POSTGRADUATE PROGRAMS at FBME to publish a new handbook.
- > Committee member of information documentation collection 2011 to date
  - To produce the annual report of the faculty
  - Faculty bulletin
  - Faculty documentation
- Member faculty promotion committee (2012 to date)
  - To produce the materials regarding the promotion of the Faculty like undergraduate and post graduate handbooks, pamphlets, brusher etc.
  - To organize the seminars at national and international level to promote the academic programs
- Panel appointment as examiner (undergraduate/ postgraduate) 2011 to date
- PhD thesis evaluation
- Member Innovative Centre of Agritechnology (UTM ICA)
- Facilitator research methodology course (2011, 2012, 2013)
- Member of MQA02 Task Force for Bachelor Science (Industrial Biology)
- > Undergraduate research university program (UROP) (2012)
- > Bachelor project supervisory committee
- > Course Coordinator
- Presentation evaluation committee and assessors undergraduate project report
- Advisor to international non-degree students (Turkish students from Istanbul University)
   (2011, 2013)
- Hostel Superintendent (School of Biological Sciences, University of the Punjab)
  - Four years, 2007-11, experience to promote student leadership development, social and cultural interactions, specially to resolve the problems of international students
- Research Farm Manager (School of Biological Sciences, University of the Punjab)
  - Two-year experience, 2009-11, to manage the experiments of applied nature in plant science at the research area of School of Biological Sciences.
- > Hostel Superintendent / Estate Officer

Two year, 1997-99, experience (to deal and accommodate the international delegations in residential hall of Soil Salinity Research Institute, Government of the Punjab.

### 9.0 Professional / management trainings

N	lo >	Year	Title of professional/management training	Organizer
	1. 2	2017	Overcoming pitfalls in Biosafety & Biocontainment	Gaia Science, Malaysia
2	2. 2	2017	Crack the code - Get it published	Universiti Teknologi Malaysia
3	3. 2	2016	Supervisory Orientation Course (AS101)	Universiti Teknologi Malaysia
4	4. 2	2016	Delivering and assessing internship course	Universiti Teknologi Malaysia
5	5. 2	2015	Effective Multimedia Creative Presentation	Universiti Teknologi Malaysia
6	5. 2	2013	International Staff Engagement Workshop	Universiti Teknologi Malaysia
7	7. 2	2013	A Team Building Retreat (Mounding Mind Skills)	PDN Resources Malaysia
8	3. 2	2013	Safety and Health at Work course	Engineering Board Malaysia
9	9. 2	2013	Engineering Management Practice course	Engineering Board Malaysia
10	0. 2	2011	Academic Advisor (PA) 2011/2012	Universiti Teknologi Malaysia
1:	1. 1	1999	Biotechnology Training Course (JICA-Kobe University)	JICA, Government of Japan
12	2. 1	1995	Training course "office management and financial matters"	Govt. of the Punjab
13	3. 1	1991	Civil defense basic general training Course	Civil Defense Department, Govt of the Punjab
14	4. 1	1986	National Cadet Corps	Govt of Pakistan

## 10.0 Academic services/Community services

#### 10.1 Journal editorial board member

- Int J. Life Sci. Biotechnol: http://dergipark.gov.tr/ijlsb/board
- Advancement in life sciences: <a href="http://www.als-journal.com/editorial-board/">http://www.als-journal.com/editorial-board/</a>
- Austin Journal of Biotechnology and Bioengineering;
   http://austinpublishinggroup.com/biotechnology-bioengineering/editorialboard.php
- Mycopath: http://pu.edu.pk/home/journal/26/Editorial-Board.html
- Modern Biosphere International Journal (MBIJ): <a href="http://www.isals.org/mbij/editorial-board/">http://www.isals.org/mbij/editorial-board/</a>

#### 10.2 Reviewer of research journals

- Rice Science
- Acta Agrobotanica
- Journal of Animal and Plant Sciences
- Archives of Plant Pathology and Plant Protection
- Archives of agronomy and soil science
- Advances in agriculture
- Pakistan Journal of Agri Research
- Pakistan Journal of Agriculture Sciences
- Journal of Desalination and Water Treatment
- Journal of Agricultural Research
- Plant Health Progress
- International J of Life Science Biotechnology

- African Journal of Microbial Research
- Journal of Agriculture and Plant Sciences
- African Journal of Agriculture Research
- Junal Teknologi
- Pakistan Journal of Phytopathology
- Journal of Plant Breeding and Crop Sciences
- Sarhad Journal of Agriculture

#### 10.3 Conference organization

- 2019. 5th International Conference on Environmental Science and Technology (ICOEST). on October 09-13, 2019. Sarajevo, Bosnia and Herzegovina. <a href="https://www.icoest.eu/scientific-committee">https://www.icoest.eu/scientific-committee</a>
- 2019. International Conference on Biosciences & Medical Engineering, on April 11-12, 2019.
   Bali, Indonesia <a href="http://icbme.fbme.utm.my/">http://icbme.fbme.utm.my/</a>
- 2018. 4th International Conference on Environmental Science and Technology (ICOEST). September 19-23, 2018. Kiev, Ukraine. https://www.icoest.eu/scientific-committee
- 2017. 2nd International Science Symposium (ISS2017) "Science Festival". September 05-08, 2017. Tbilisi, Georgia. <a href="http://www.issnwsa.com/scientific-committee/">http://www.issnwsa.com/scientific-committee/</a>
- 2017. ICOF 2017. 4th International Conference on Agriculture and Forestry. "Current Challenges and Future Perspectives of Agriculture." August 24-25, 2017. Colombo, Sri Lanka. <a href="http://agroconference.com/conference-chair-committee/">http://agroconference.com/conference-chair-committee/</a>
- 2016. 3rd International Conference on Agriculture and Forestry "Sustainable agriculture and forestry as essential response to the challenges of global food security and environment sustainability". June 1-3, 2016. Manila, Philippine. <a href="http://agroconference.com/conference-chair-committee/">http://agroconference.com/conference-chair-committee/</a>
- 2016 International Conference of Biosciences and Medical Engineering 2016 (ICBME 2016)
   ""Enhancing multidisciplinary research areas of Biosciences & Medical Engineering: Transitioning
   research findings into practical applications". November 10-11, 2016. Universiti Teknologi
   Malaysia (UTM), Johor Bharu, Malaysia. http://icbme.fbme.utm.my/
- 2016 The first International Science Symposium (ISS2016). September 01-04, 2016. Anadolu Kulübü Büyükada-Istanbul, Turkey. <a href="http://issnwsa.com/scientific-committee.aspx">http://issnwsa.com/scientific-committee.aspx</a>
- 2015 International Conference on Agriculture and biology science 2015 (ABS 2015). July 25-28, 2015. Beijing, China.
- 2012 International Conference on Applied Life Sciences (ICALS2012). September 10-12, 2012.
   Konya, Turkey. <a href="https://www.isals.org/icals2012">www.isals.org/icals2012</a>
- 2012 The 3<sup>rd</sup> International Biotechnology and Biodiversity conference "BIOJOHOR 2012". June 9-11, 2012. Johor Bahru, Malaysia. http://www.biojohor.my/2012/

#### 10.4 Foreign Examiner of PhD thesis

Organization/University	Title of dissertation		
<ul> <li>University of Peshawar, Khyber Pakhtunkhwa, Pakistan</li> </ul>	Prevalence of Bacterial Pathogens Causing Nosocomial Infections: with Special Reference to Identification of Resistant Genes and Drug Designing		
<ul> <li>Prist University, Tamil Nadu, India</li> </ul>	Evaluation of Sida Cordata (BRUM. F.) Bross for its Antibacterial, Anthelminthic, Antioxidant and Anti-inflammatory Properties.		

### 11.0 Awards/ Recognition/ Professional Achievements

- Excellent Performance Award and cash prize (Citra Karishma), Universiti Teknologi Malaysia (UTM)
- Breeder of "Shaheen Basmati"

A Basmati rice variety recently approved for general cultivation in Pakistan, possessing short maturity period (first short duration Basmati rice variety) and relatively salt tolerance.

• Ministry of Science and Technology (MOSTI), Malaysia.

Member of evaluation/monitoring panel of Biotech Research Projects

- Industrial consultant: Technologies for Bio Molecular
- PhD supervisor approved by HEC (Higher Education Commission of Pakistan)
- Monbukagakusho scholarship

For MS leading to PhD (Ministry of Education, Culture, Sports, Science and Technology, Japan).

- Award of Excellence (Active blended learning course)
- Best E-learning teacher award year 2014
- Best student presentation award

In "The International Conference on Sustainable Agriculture, St. Catharine, Canada". Aug. 22-27, 2005.

• JICA Biotechnology Group Training Course

March-July 1999, Faculty of Agriculture, Kobe University, Kobe, Japan

#### 12.0 References

On Request