

## CURRICULUM VITAE



Name Muhammad Arif  
Domicile Peshawar  
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Email: [marifkhan75@aup.edu.pk](mailto:marifkhan75@aup.edu.pk), marifkhan75@yahoo.com  
Area of interest Seed priming, Crop nutrition and dual purpose crops, use of biochar as soil amendment

### ACADEMIC QUALIFICATIONS

Degree/Certificate	Marks obtained	Division	Institute
Post doctorate			Bangor University, North Wales, UK
Ph.D.*	3.80/4.00 (90.42 %)	Ist	The Univ. of Agric. Peshawar
M.Sc. (Hons)	3.96/4.00 (90.70 %)	Ist	The Univ. of Agric. Peshawar
B.Sc. (Hons)	3.65/4.00 (83.08 %)	Ist	The Univ. of Agric. Peshawar
F.Sc.	724/1100 (65.8 %)	Ist	Islamia college Peshawar
S.S.C.	645/850 (75.9 %)	Ist	Islamia collegiate School, Peshawar

\* Thesis was evaluated by two foreign experts from the United Kingdom and China.

### Ph.D. Dissertation Title

Effect of seed priming on emergence, yield and storability of soybean (2003-2004)

### M.Sc. (Hons) thesis Title

Effects of phosphorus and nitrogen on rice varieties under continuous and weekly irrigation systems (1998)

### AWARDS

1. Silver Medal (M.Sc.(Hons)1999) by obtaining 2nd position at the University level.
2. Award of Higher Education Commission (HEC) Indigenous PhD scholarship for Ph.D. studies.
3. Award of HEC Fellowship for Post Doctorate at UK in 2008-2009.
4. Research Productivity Award for the year 2011 by Pakistan Council for Science and Technology.
5. Research Productivity Award for the year 2012 by Pakistan Council for Science and Technology.
6. Got Charles Wallace Fellowship for the year 2016-2017 sponsored by British Council, UK.
7. Got Best University Teacher Award for the year 2016-2017.

## PROFESSIONAL EXPERIENCE

1. Working as Professor in the department of Agronomy, the University of Agriculture, Peshawar Pakistan from 18-5-2017.
2. Has been working as Associate Professor in the department of Agronomy, the University of Agriculture, Peshawar Pakistan from 1-5-2012 to 18-5-2017.
3. Worked as Assistant Professor in department of Agronomy, the University of Agriculture, Peshawar Pakistan from 12-1-2009 to 28-5-2012.
4. Worked as Farm Manager/Lecturer in the department of Agronomy, the University of Agriculture, Peshawar Pakistan from 1-9-2001 to 11-1-2009.
5. Has been working as Director Farms, the University of Agriculture, Peshawar Pakistan since August, 2015 as additional charge.
6. Worked as Director Administration, the University of Agriculture, Peshawar Pakistan from June, 2014 to August, 2015 as additional charge.
7. Worked as Director Farms, the University of Agriculture, Peshawar Pakistan from 26-11-2009 to 7-9-2010 as additional charge.
8. Worked as Associate Farm Manager, the University of Agriculture, Peshawar Pakistan from 7-9-2010 to June, 2014.
9. Worked as Manager, Offices of Research, Innovation and Commercialization (ORICs) from June, 2011 to August, 2012.
10. Has been working as Additional Director, Offices of Research, Innovation and Commercialization (ORICs) since September, 2012.
11. Worked as Administrative Officer of the University of Agriculture, Peshawar from November, 2013 to June, 2014 as additional charge.
12. Has been working as convener Shop Allotment Committee of the University of Agriculture, Peshawar since August, 2014.
13. Has been working as Director Farms, the University of Agriculture, Peshawar since August, 2015.

## STUDENTS' SUPERVISION:

1. Have supervised 4 Ph.D. students as a major supervisor.
2. Have supervised 6 Ph.D. students as a major member.
3. Supervising two Ph.D. students as a major supervisor.
4. Have supervised twelve M.Sc. (Hons) students as a major supervisor.
5. Supervising three M.Sc. (Hons) students as a major supervisor.
6. Have supervised eleven B.Sc. (Hons) students as a major supervisor.
7. Supervising two B.Sc. (Hons) students as a major supervisor.

## RESEARCH PROJECTS:

S.NO.	Title of the research project	Donor Agency	Amount (Rs.)	Duration
1.	Performance of wheat varieties and purification of local variety at DI Khan	Inter-cooperation, Project for Livelihood Improvement South D.I. Khan	0.17985 millions	On year (Sept, 2003 to Dec 2004)
2.	Maize seed priming with nutrient solution for improving germination, emergence and yield	The University of Agriculture Peshawar and Higher Education Commission (HEC)	0.20 millions	Dec. 2008 to Dec. 2009
3.	Integrated use of biochar, FYM and nitrogen fertilizer for enhancing productivity of cereal and legume based cropping	Higher Education Commission of Pakistan (HEC)	1.187456 millions	April, 2011 to April, 2013

patterns				
4.	Adaptability and production technology of jatropha plants	Directorate of Science and Technology, Peshawar	1.0 millions	2012-2015
5.	Improving phosphorus availability, use efficiency and productivity through biochar for sustainable cereal based cropping system	Higher Education Commission of Pakistan	2.6 millions	2015-2017
6.	'Climate smart' agriculture for steering food security by fostering cropping intensity in seasonal gaps	U.S.-Pakistan Centers for Advanced Studies in Agriculture and Food Security (USPCAS-AFS) University of Agriculture Faisalabad and University of California, Davis	3.35 millions	2015-2017
7	Development of water efficient hybrid wheat for Pakistan and China	Pakistan Science Foundation	7.33 millions	2016-2018
8	The Horticulture Advancement Activity (THAzA)-GCP/PAK/144/USA	Food and Agriculture Organization of the United Nations (FAO)	3.271 632 Millions	2018-2019
9	Restoring Subsistence and Commercial Agriculture in the Newly Merged Districts" (GCP/PAK/138/USA)	Food and Agriculture Organization of the United Nations (FAO)	3.210330 millions	2018

## SERVICES

1. Acting as reviewer for Archives of Agronomy and Soil Science, an American Journal.
2. Acting as reviewer for African Journal of Agricultural Research (AJAR)
3. Acting as reviewer for Soil and Tillage Research, Elsevier.
4. Acting as reviewer for Pakistan Journal of Agricultural Sciences, Faisalabad.
5. Acting as reviewer for Sarhad Journal of Agriculture, The University of Agriculture, Peshawar.
6. Acting as reviewer for Pakistan Journal of Weed Science, The University of Agriculture, Peshawar.
7. Acting as reviewer for Pakistan Journal of Botany
8. Convener of sale/purchase committee of the Farms of the University of Agriculture Peshawar.
9. Member Board of Studies of the department of Agronomy.
10. Member Board of Studies in Agricultural Extension Education and Communication department
11. Member Board of Studies in Plant Breeding and Genetics department
12. Member Board of Studies in Plant Breeding and Genetics department
13. Member, Purchase committee in Agronomy department
14. Member Academic Council of the University from 2008-2010.
15. Nominated as Subject Expert in the discipline of Plant Physiology for revision of HEC curriculum during 2013.
16. Member departmental promotion committee of the University.
17. Worked as expert for cereal and fodder crops in public service commission, KP.

## MEMBERSHIP IN PROFESSIONAL/ACADEMIC SOCIETIES

1. Member Academic Council of the University from 2008 to 2010.
2. Approved HEC supervisor for Ph.D./M.S. since 2007.
3. Life Member of British Alumni Association of Pakistan (BAAP)
4. Life member of Weed Science Society of Pakistan (WSSP)
5. Life member of Soil Science Society of Pakistan (SSSP)
6. Life member of Pakistan Society of Agronomy
7. Life member of Pakistan Botanical Society
8. Life member of Scientific Research Council, Pakistan
9. Joint Secretary Pakistan Seed Academy- established by Federal Seed Certification and Registration Department and University of Agriculture, Peshawar- a public private partnership in seed innovations.
10. Member of Selection Board of University of Haripur, Haripur.

## TRAINING CONDUCTED/ORGANIZED FOR FRs OF KHYBER PAKHTUNKHWA

1. Conducted training for the farmers of FR-Peshawar and Kohat from 14-16th July, 2011 sponsored by Project for Area Development, Agriculture Extension FATA.
2. Conducted training for the farmers of FR-Bannu and Lakki Marwat from 19-21th July, 2011 sponsored by Project for Area Development, Agriculture Extension FATA.
3. Conducted training for the farmers of FR-Tank and D.I. Khan from 25-27th July, 2011 sponsored by Project for Area Development, Agriculture Extension FATA.
4. Conducted training for the farmers of FR-Peshawar and Kohat from 23-25th April, 2012 sponsored by Project for Area Development, Agriculture Extension FATA.
5. Conducted many field days in FR Peshawar under the Project for Area Development, Agriculture Extension FATA.

## TRAININGS/CONFERENCES/WORKSHOPS ORGANIZED:

S. No.	Title of the Conference/Trainings/Workshops	Number of Participants	Status
1	National conference on " <b><i>Innovative Technologies and Sustainable Development in Agriculture</i></b> " organized by AUTA at Bara Gali campus of the University of Peshawar-Pakistan on August 19-22, 2014.	200	Organizer
2	One day training on, ' <b>Data analysis techniques for crop, animal and social sciences</b> ' organized by Agriculture University Teachers' Association (AUTA) on 6th February, 2014.	100	Organizer
3	One day seminar on, ' <b>Prospects of Jatropha as a biodiesel plant in Pakistan</b> ' organized by Agriculture University Teachers' Association (AUTA) on 19th June, 2014.	50	Organizer
4	Two days training on ' <b>How to write a worth publishing research paper/thesis</b> ', organized by Agriculture University Teachers' Association (AUTA) on 6th February, 2014.	75	Organizer

5.	One day training on, ' <b>Getting Ready for Foreign Scholarships</b> ' organized by Agriculture University Teachers' Association (AUTA) on 6th	75	Organizer
6.	Two days training workshop on 'Emergency management' organized by the University of Agriculture, Peshawar and Rescue 1122, Peshawar.	100	Organizer
7.	Capacity development of fruit plant nursery growers in nursery establishment and management of Khyber and Kurram agency from 16-20 January, 2017 sponsored by FAO.	25	Organizer
7.	International Conference on, 'Innovations in Agriculture' sponsored by the University of Agriculture, Peshawar and PSF	100	Organizer
8.	Two days training on ' <b>How to write a worth publishing research paper</b> ', organized by PASTIC and the University of Agriculture Peshawar, 2017.	70	Organizer
9.	Three days international conference on 'Climate Change Threats to Agriculture and Food Security', 22-24 November, 2017.	200	Organizer
10.	Two days national conference on, 'Climate Smart Agriculture and Crop Modeling', 18-19 April, 2018.	150	Organizer
11	Three days International conference on 'Biofortification of staple food crops' 24-26 September, 2018 sponsored by UAP and HEC	120	Organizer
12	Two days training on 'Classical and molecular approaches in wheat breeding' 29-30 January, 2019 sponsored by PSF	50	Organizer

#### **NATIONAL/INTERNATIONAL CONFERENCES ATTENDED:**

Participated in more than 100 national and international conferences/seminars/workshops or trainings.

#### **NATIONAL PATENT**

An Automatic Pneumatic Precision Seed Planter has been developed with the help of Engineers of UET Peshawar and a case is accepted for its patent.

#### **INTERNATIONAL BOOK CHAPTER**

1. **Riaz, M.**, M.S. Arif, M.S. Ashraf, R. Mahmood, T. Yasmeen, M.B. Shakoore, S.M., Shahzad, M. Ali, I. Saleem, M. Arif, S. Fahad. 2019. A Comprehensive Review on Rice Responses and Tolerance to Salt Stress. In: Hasanuzzaman, M., M. Futija, K. Nahar, J.K. Biswas (Eds.), *Advances in Rice Research for Abiotic Stress Tolerance*. Woodhead Publishing, Elsevier, Duxford, United Kingdom, pp. 133-158.
2. Amanullah, Shah Khalid, Imran, Hamdan Ali Khan, Muhammad Arif, Abdel Rahman Altawaha, Muhammad Adnan, Shah Fahad and Brajendra Parmar. Organic Matter

Management in Cereals Based System: Symbiosis for Improving Crop Productivity and Soil Health

3. Fahad, S., M. Adnan, M. Noor, M. Arif, M. Alam, I.A. Khan, H. Ullah, F. Wahid, I.A. Mian, Y. Jamal, A. Basir, S. Hassan, S. Saud, Amanullah, **M. Riaz**, C. Wu, M.A. Khan, D. Wang. 2019. Major Constraints for Global Rice Production. In: Hasanuzzaman, M., M. Futija, K. Nahar, J.K. Biswas (Eds.), *Advances in Rice Research for Abiotic Stress Tolerance*. Woodhead Publishing, Elsevier, Duxford, United Kingdom, pp. 1-22.
4. Shakoor, M.B., **M. Riaz**, N.K. Niazi, S. Ali, M. Rizwan, M.S. Arif, M. Arif. 2019. Recent Advances in Arsenic Accumulation in Rice. In: Hasanuzzaman, M., M. Futija, K. Nahar, J.K. Biswas (Eds.), *Advances in Rice Research for Abiotic Stress Tolerance*. Woodhead Publishing, Elsevier, Duxford, United Kingdom, pp. 385-398.
5. Arif, M., T. Jan, M. Riaz, S. Fahad, M.S. Arif, M.B. Shakoor, Amanullah, F. Rasul. 2019. Advances in Rice Research for Abiotic Stress Tolerance: Agronomic Approaches to Improve Rice Production Under Abiotic Stress. In: Hasanuzzaman, M., M. Futija, K. Nahar, J.K. Biswas (Eds.), *Advances in Rice Research for Abiotic Stress Tolerance*. Woodhead Publishing, Elsevier, Duxford, United Kingdom, pp. 585-614.
6. Shah Fahad, Muhammad Adnan, Muhammad Noor, Muhammad Arif, Mukhtar Alam, Imtiaz Ali Khan, Hidayat Ullah, Fazli Wahid, Ishaq Ahmad Mian, Yousaf Jamal, Abdul Basir, Shah Hassan, Shah Saud, Amanullah, Muhammad Riaz, Chao Wu, Mushtaq Ahmad Khan and Depeng Wang. 2019. Advances in Rice Research for Abiotic Stress Tolerance: Major constraints for global rice production. In: Hasanuzzaman, M., M. Futija, K. Nahar, J.K. Biswas (Eds.), *Advances in Rice Research for Abiotic Stress Tolerance*. Woodhead Publishing, Elsevier, Duxford, United Kingdom.
7. Fahd Rasul, Ashfaq Ahmad, **Muhammad Arif**, Ishaq Ahmad Mian, Kawsar Ali, Muhammad Farooq Qayyum, Qaiser Hussain, Muhammad Aon, Shahzad Latif, Ruben Sakrabani, Muhammad Saghir, Genxing Pan, and Simon Shackley. 2017. **Biochar for Agriculture in Pakistan**. Accepted as book chapter in "**Sustainable Agriculture Reviews**" published by Springer, UK. Volume 22-2017. ISBN 978-3-319-48005-3 ISBN 978-3-319-48006-0 (eBook), DOI 10.1007/978-3-319-48006-0.

## PUBLICATIONS IN IMPACT FACTOR JOURNAL

Year	S. No.	Research papers	IF (JCR 2018)
		Baseer Muhammad, Muhammad Adnan, Fazal Munsif, Shah Fahad, Muhammad Saeed, Fazli Wahid, Muhammad Arif, Jr. Amanullah, Depeng Wang, Shah Saud, Muhammad Noor, Muhammad Zamin, Fazli Subhan, Beena Saeed, Mian Ahmad Raza and Ishaq Ahmad Mian. 2019. Substituting urea by organic wastes for improving maize yield in alkaline soil. <i>Journal of Plant Nutrition</i> . <a href="https://doi.org/10.1080/01904167.2019.1659344">https://doi.org/10.1080/01904167.2019.1659344</a>	0.75
		Shah Fahad, Faheem Ahmed Khan, NuruliarizkiShinta Pandupuspitasari, Saddam Hussain, Imtiaz Ali Khan, Muhammad Saeed, Shah Saud, Shah Hassan, Muhammad Adnan, Amanullah, Muhammad Arif, Mukhtar Alam, Hidayat Ullah, Khalid Rehman Hakeem, Hesham Alharby, Muhammad Riaz, Muhammad Sameeullah, Hafiz Mohkum Hammad, Wajid Nasim, Shakeel	4.005

- Ahmad, Muhammad Afzal, Salem Safer Alghamdi, Atif A. Bamagoos, Elsayed Fathi Abd\_Allah, and Jianliang Huang. 2019. Suppressing photorespiration for the improvement in photosynthesis and crop yields: A review on the role of S-allantoin as a nitrogen source. *Journal of Environmental Management* 237 (2019) 644–651.
- Shahzad Ali, Yueyue Xub, Irshad Ahmad, Qianmin Jia, Xiangcheng Ma, Amir Sohail, Manzoor, Muhammad Arif, Xiaolong Ren, Tie Cai, Jiahua Zhanga, Zhikuan Jia. 2018. The ridge-furrow system combined with supplemental irrigation strategies to improve radiation use efficiency and winter wheat productivity in semiarid regions of China. *Agricultural Water Management* 213 (2019): 76–86. 3.182
- 2018 1 Gul, S., R. Uddin, N.U. Khan, M. Arif, R. Goher and M. Zakaria. 2018. Inheritance studies through combining ability for morphological and yield traits in F1 populations of *Brassica napus*. *The J. Animal & Plant Sci.* 28(4):1094-1102. 0.407
- 2 K. Ali, M. Arif, B. Islam, Z. Hayat, A. Ali, K. Naveed and F. Shah. 2018. Formulation of biochar based fertilizer for improving maize productivity and soil fertility. *Pak. J. Bot.*, 50(1): 135-141. 0.75
- 3 Iqbal, S., M. Arif, C. Thierfelder, T. Yasmeen, and T. Li. 2018. Reducing nitrogen losses and increasing maize productivity in organic manures-amended soils by increasing the ridge to furrow proportion. *Experimental Agriculture*, 1-15. doi:10.1017/s0014479718000091. 1.68
- 4 Jalal, F., Arif, M., Ahmad, I. et al. *Gesunde Pflanzen* (2018). 0.639
- 5 <https://doi.org/10.1007/s10343-017-0412-x>
- 6 Shahid Iqbal, H.Z. Khan, T. Li and M. Arif. 2018. Organic nitrogen source addition for improving the physicochemical properties of sandy loam soil and maize performance. *Communications in Soil Science and Plant Analysis*. DOI: 10.1080/00103624.2017.1420798. 0.54
- Muhammad Adnan, Zahir Shah, Shah Fahad, Muhamamd Arif, Mukhtar Alam, Imtiaz Ali Khan, Ishaq Ahmad Mian, Abdul Basir, Hidayat Ullah, Muhammad Arshad, Inayat-ur-Rehman, Shah Saud, Muhammad Zahid Ihsan, Yousaf Jamal, Amanullah, Hafiz Mohkum Hammad and Wajid Nasim. Phosphate-solubilizing bacteria nullify the antagonistic effect of soil calcification on bioavailability of phosphorus in alkaline soils. *Scientific Reports*.7:16131DOI:10.1038/s41598-017-16537-51. 4.122
- 2017 7 Muhammad Arif, Muhammad Ilyas, Muhammad Riaz, Kawsar Ali, Kamran Shah, Izhar Ul Haq and Shah Fahad. 2017. Biochar improves phosphorus use efficiency of organic-inorganic fertilizers, maize-wheat productivity and soil quality in a low fertility alkaline soil. *Field Crops Research* 214:25–37. 3.127
- 8 Arif, M., M. Tariq, M.T. Jan, H. Akbar, I.A. Mian and M. Sajid. 2017. Effect of nitrogen application timing on yield components, fodder, grain, and oil yields of *Brassica* cultivars. *Communications in Soil Science and Plant Analysis*. DOI:10.1080/00103624.2017.1299164 0.54
- 9

- Saud, S., S. Fahad, C. Yajun, M.Z. Ihsan, H.M. Hammad, W. Nasim, Amanullah, M. Arif and H. Alharby. 2017. Effects of nitrogen supply on water stress and recovery mechanisms in Kentucky Bluegrass plants. *Front. Plant Sci.* 8:983. doi: 10.3389/fpls.2017.00983. IF = 4.495 3.678
- 10 H. Naheed, Raziuddin, S. Abid1, Q. Sohail, G. Hassan, M. Arif. 2017. Heritability and combining ability of vegetative growth and phenological development of diallel crosses of rapeseed. *Genetika.* 49(1): 117-126. IF = 0.308 0.392
- 11 Muhammad Riaz, Mahnaz Roohi, Muhammad Saleem Arif, Qaiser Hussain, Tahira Yasmeen, Tanvir Shahzad, Sher Muhammad Shahzad, Hufsa Faeer Muhammad, Muhammad Arif, and Muhammad Khalid. 2017. Corncob-derived biochar decelerates mineralization of native and added organic matter (AOM) in organic matter depleted alkaline soil. *Geoderma.* 294:19–28. IF = 2.855. 3.74
- 12 Shahid Iqbal, Christian Thierfelder, Haroon Zaman Khan, H.M. Rashad Javeed, Muhammad Arif and Muhammad Shehzad. 2017. Maximizing maize quality, productivity and profitability through a combined use of compost and nitrogen fertilizer in a semi-arid environment in Pakistan. *Nutrient Cycling in Agroecosystems.* 107:197–213. DOI 10.1007/s10705-017-9829-y. IF=1.49 2.105
- 13 Kawsar Ali, Muhammad Arif, Farooq Shah, Aamir Shehzad, Fazal Munsif, Ishaq Ahmad Mian and Afaq Ahmad Mian. 2017. Improvement in maize (*Zea mays* L.) growth and quality through integrated use of biochar. *Pakistan Journal of Botany.* 49(1): 85-94. IF=0.750 0.75
- 14 Arif, M. K. Ali, M.T. Jan, Z. Shah, D.L. Jones, R.S. Quilliam. 2016. Integration of biochar with animal manure and nitrogen for improving maize yields and soil properties in calcareous semi-arid agroecosystems. *Field Crops Research.* 195:28–35. 3.127
- 2016 15 Fazal Jalal, Muhammad Arif, Kawsar Ali, Fazal Munsif, Muhammad Jamal Khan and Bushra Khan. 2016. Integration of biochar and legumes in summer gap for enhancing productivity of wheat under cereal based cropping system. *Pak. J. Bot.*, 48(6): 2281-2288.
- 16 Munsif, F., M. Arif, K. Ali, M.J. Khan, S. Munir and F. Rasul. 2016. Evaluation of various morpho-physiological and growth traits of dual purpose wheat under early sowing dates. *Pak. J. Bot.* 48(1): 81-88, 2016. 0.75
- 17 Basir, A., M.T. Jan, M. Arif and M.J. Khan, 2016. Response of tillage, nitrogen and stubble management on phenology and crop establishment of wheat. *Int. J. Agric. Biol.*, 18: 1–8. 0.869
- 18



	Muhammad Adnan, Zahir Shah, Muhammad Arif, Muhammad Jamal Khan, Ishaq Ahmad Mian, Muhammad Sharif, Mukhtar Alam, Abdul Basir, Hidayat Ullah, Inayat-ur-Rahman, Nouman Saleem. 2016. Impact of rhizobial inoculum and inorganic fertilizers on nutrients (NPK) availability and uptake in wheat crop. <i>Canadian J. Soil Sci.</i> 96(2):169-176. (doi: 10.1139/cjss-2016-0012).	
19	Arif, M., F. Jalal, M.T. Jan, D. Muhammad and R.S. Quilliam. 2015. Incorporation of biochar and legumes into the summer gap: improving productivity of cereal-based cropping systems in Pakistan. <i>Agroecology and Sustainable Food Systems.</i> 39(4): 391-398.	1.085
2015	20	1.14
	Shah Fahad, Saddam Hussain, Shah Saud, Fahad Khan, Shah Hassan, Amanullah Jr, Wajid Nasim, Muhammad Arif, Fei Wang, Jianliang Huang. 2015. Exogenously Applied Plant Growth Regulators Affect Heat-stressed Rice Pollens. <i>J. Agron Crop Sci.</i> online DOI: 10.1111/jac.12148.	
	21	2.571
	Shahen Shah, Ghufran Ghani, Hamayoon Khan, Muhammad Arif, Abdul Qahar, Inamullah, Asad Ali and Musharaf Ahmad. 2015. Response of maize cultivars to phosphorus and zinc nutrition. <i>Pak. J. Bot.</i> , 47(SI): 289-292.	
	22	0.75
	Naveed, K., M.A. Khan, M.S. Baloch, M. Arif, S.A. Naqvi, J. Khan, and S. Ali. 2015. Early planting date can compensate the reduction in wheat yield due to fodder cutting in dual purpose wheat. <i>Pak. J. Agric. Sci.</i> , 52(2): 469-477.	
	23	0.677
	K. Ali, M. Arif, M.T. Jan, M.J. Khan and D.L. Jones. 2015. Integrated use of biochar: a tool for improving soil and wheat quality of degraded soil under wheat-maize cropping pattern. <i>Pak. J. Bot.</i> 47(1): 233-240.	
	24	0.75
	K. Ali, M. Arif, M.T. Jan, T. Yaseen, F. Munsif and M. Waqas. 2015. Biochar: A novel tool to enhance wheat productivity and soil fertility on sustainable basis under wheat-maize-wheat cropping pattern. <i>Pak. J. Bot.</i> , 47(3): 1023-1031.	
	25	0.75
	F. Munsif, M. Arif, M.T. Jan, Kawsar Ali and M.J. Khan. 2015. Influence of sowing dates on phenological development and yield of dual purpose wheat cultivars. <i>Pak. J. Bot.</i> 47(1): 83-88.	
	26	0.75
	F. Munsif, M. Arif, K. Ali, M.T. Jan and M.J. Khan. 2015. Influence of planting dates on grain quality of different wheat cultivars under dual purpose wheat system. <i>Int. J. Agric. and Bio.</i> 17(5):945-952.	
	27	0.869
	Kawsar Ali, Muhammad Arif, Shahen Shah, Zahid Hussain, Asad Ali, Said Munir and Hassan Sher. 2015. Effect of organic and inorganic nutrients sources on phenology and growth of wheat. <i>Pak. J. Bot.</i> , 47(6): 2215-2222.	
	28	0.75

		<b>Arif, M., M. T. Jan, I.A. Mian, S.A. Khan, P. Hollington and D. Harris. 2014. Evaluating the impact of osmopriming varying with polyethylene glycol concentrations and durations on soybean. Int. J. Agric. Biol. 16(2): 349-364.</b>	
2014	29		0.869
		Shah, A., M. Akmal, <b>M. Arif</b> and M.J. Khan. 2014. Yield potential of spring wheat influenced by crop residue, tillage system and nitrogen rate on irrigated land. <i>Sains Malaysiana</i> . 43(12):1811-1819.	
	30		0.565
		Miraj, G., H.U. Shah and M. Arif. 2013. Priming maize ( <i>zea mays</i> ) seed with phosphate solutions improves seedling growth and yield. <i>J. Animal &amp; Plant Sci.</i> 23(3):893-899.	
2013	31		0.407
		<b>Arif, M., M. Tariq, F. Munsif, M.T. Jan, A. Rab and A. Khan. 2012. Effect of nitrogen application timing and cutting treatments on phenology and leaf area of three brassica cultivars. Communications in Soil Science and Plant Analysis, 43:2809–2819.</b>	
2012	32		0.54
		Shah, H., T. Jalwat, <b>M. Arif</b> , G. Miraj. 2012. Seed priming improves early seedling growth and nutrient uptake in mungbean. <i>J. Plant Nutrition</i> . 35:805–816.	
	33		0.565
		Rab, A., M. Sajid, N.U. Khan, K. Nawab, <b>M. Arif</b> and M.K. Khattak. 2012. Influence of storage temperature on fungal prevalence and quality of citrus fruit (cv. blood red). <i>Pak. J. Bot.</i> 44(2): 831-836.	
	34		0.75
		M. Sajid, M. A. Khan, A. Rab, S. N. M. Shah, <b>M. Arif</b> , Z. Hussain and M. Mukhtiar. 2012. Impact of nitrogen and phosphorus on seed yield and yield components of okra cultivars. <i>The Journal of Animal and Plant Sciences</i> , 22(3): 704-707.	
	35		0.407
		Jan, M.T., M.J. Khan, Farhatullah, <b>M. Arif</b> , M.Z. Afridi, A. Khan and H. Akbar. 2012. Integrated management of crop residue and N fertilizer for wheat production. <i>Pak. J. Bot.</i> , 44(6): 2015-2019.	
	36		0.75
		<b>Arif, M., M.T. Jan, N.U. Khan, Ziauddin, H. Akbar, and M.Z. Khan. 2011. Effect of cropping system and residue management on maize. Pak. J. Bot. 43(2): 915-920.</b>	
2011	37		0.75
		M.J. Khan, M.T. Jan, M. Shafi, <b>M. Arif</b> and S. Perveen. 2011. The effect of using waste water for tomato. <i>Pak. J. Bot.</i> 43(2):1033-1044.	
	38		0.75
		M.T. Jan, A. Khan, M.J. Khan, <b>M. Arif</b> , M. Shafi and M.Z. Afridi. 2011. Improving wheat productivity through source and timing of nitrogen fertilization. <i>Pak. J. Bot.</i> 43(2): 905-914.	
	39		0.75
		Rozina, H., H. Khan, Shahensha, L. Naz, I. Munir, <b>M. Arif</b> , I.A. Khalil and A.Z. Khan. 2011. Performance of chickpea genotypes under two different environmental conditions. <i>African J. Biotech.</i> 10:1534-1544.	
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