

Curriculum Vitae

Personal Profile:

Name:	Shawaiz Iqbal
Date of Birth:	25 th January, 1987
Marital Status:	Married
Nationality:	Pakistani
Passport #:	UL1336742
Present Residential/ Mailing Address:	Rice Research Institute, Kala Shah Kaku 17-km GT road Lahore, Punjab, Pakistan
Current Position:	Scientific Officer, Department of Agronomy, Rice Research Institute, Kala Shah Kaku (July 2012 to date)



Academic Profile:

M.Sc (Hons) Agriculture (Agronomy)	2008–2010
Project for Thesis:	Impact of nitrogen nutrition and irrigation scheduling on the growth, yield and radiation use efficiency of wheat (<i>Triticum aestivum</i>).
University of Agriculture, Faisalabad	CGPA= 3.59/4.00
B.Sc (Hons) Agriculture, (Agronomy)	2004–2008
University of Agriculture Faisalabad	CGPA= 3.49/4.00

Career Objective:

I am keen to succumb the planet's critical issue of ever-rising demand for food, and working in research to play my part in grappling the urgent challenging task, which the global agriculture is confronting with at present, and conditions will exacerbate for feeding the mammoth population. My aim is to make efficient and productive crop through water, nutrient and weed management, and modern mechanization. I am committed towards reducing the actual and potential yield gap to poverty alleviation.

Job Description:

Farm Mechanization and Nutrient Management:

I am working on the development of new resource saving rice production technologies such as dry seeded rice (DSR) and alternate wetting and drying (AWD), evaluating the suitable and economical crop establishment techniques for rice-wheat cropping system. I am carrying research on Site Specific Nutrient Management (SSNM) and plant need base application by using Leaf Color Chart (LCC) and Soil Plant Analysis Development (SPAD) chlorophyll meter, macro and micro nutrient management (soil and foliar application), bio-fortification, residue management in rice-wheat cropping system, and green manuring. Working to introduce agricultural mechanization to obviate the man-power in crop production through Rabi drill, Zero-tillage drill, Multi-crop planter, Happy seeder, Straw chopper, and Mulcher. I am investigating water conservation strategies through water stress application at different growth stages of the rice crop.

Weed Management:

Exploring new chemistry of pre-emergence, early post-emergence, and late post-emergence herbicides to manage noxious weed in DSR system of rice cultivation. Conducting high quality herbicide screening experiments/trials for the registration of new chemicals used for weed control in crop production, contributing to the biological profiling and label development of herbicides, and adjacent technology. Integrated Weed Management (IWM) approaches to solve the problem of multiple herbicides resistant weed. Root-shoot behavior of wheat (*Triticum aestivum*) under varying different crop establishing and weed management techniques.

Testing of Candidate Rice Genotypes:

Planning and execution of agronomic studies on rice for the development of high yielding and early maturing varieties, which are resistant to insect pest and diseases. Carrying the trials to check the regional adoptability of new promising varieties at different agro-climatic zones of Punjab, Pakistan. I am also studying the effect of different sowing dates (temperature and day length) on physiological development, photoperiod sensitivity, yield components and economic yield of newly evolved rice varieties.

Rice Production Technology Dissemination:

Present research results in various field day, extension meetings and scientific conferences; and Collaborate effectively with national and international scientists, donors, and extension specialists. Developing innovation alliances with a diverse set of public and private sector partners, including advanced research institutions.

Salient achievements:

1. I have successfully demonstrated and popularized the innovative resource saving technologies (DSR and AWD) at farmers' field.
2. Tested and optimized the DSR rice drill maintaining the row to row and plant to plant spacing with particular emphasis on crop growth behavior.
3. Screened-out pre- (pendimethalin and triafamone + ethoxysulfuron + sodium) and post-emergence (fenoxaprop-p-ethyl + penoxsulum and fenoxaprop-p-thyl + ethoxysulfuron + isoxadifen) herbicides for effective weed control making the DSR system of rice cultivation as a success story.
4. Developed the production technology for newly evolved rice cultivars (Chenab Basmati, Punjab Basmati, Kissan Basmati, Super Gold, and Super Basmati 2019) for DSR as well as for transplanted rice.
5. Sorted-out the three best coarse grain rice lines shown stability on various sowing dates (temperature and day length) and eclectic ecological zones, now in the way to approval for general cultivation.

Projects:

1. 2016–2018: Demonstration of New and Innovative Technologies to Farmers in Basmati Rice Tract of Punjab, Pakistan funded by Asian Development Bank; Amount US\$ 40,000. (Rs. 4.2 million).
2. 2016–2019: Sustainable agriculture for food security funded by Agriculture Innovation Programme (AIP), CIMMYT, Pakistan; Amount US\$ 17150 (Rs. 1.8 million)

Duties Performed Other than Research

I am performing the additional duties assigned such as Farm Manager, State Incharge, Incharge of green house, Member of monitoring and evaluation committee of the Institute, Incharge Officer Hostel, Incharge Clean and Green, and Member Income Generation Committee.

Training Imparted:

Training imparted to different stakeholders of rice such as Fertilizer companies (Fatima Fertilizer, Fauji Fertilizer, Engro Fertilizer, Pak Arab Fertilizers), Pesticide companies (Bayer crop sciences, Sygenta, Jaffer brothers limited, FMC, Evyol, Capricon), NGOs (DOABA foundation, Rice Partner Limited, AGAHI: Association for Gender Awareness & Human Empowerment), Seed companies (Sana Seed Corporation, Seyfert seed, Rachna seed), Farmer training programs at farmers' field in traditional and nontraditional rice-wheat growing areas and Master trainer training of extension workers of public sector.

Students' Research Supervised:

Supervised research work of 14 B.Sc., M.Sc. (*Hons*) and Diploma students from Agriculture Universities/Research Institutions during their internship programme.

Professional Software Skills:

I am using Statistical Tool for Agricultural Research (STAR) and Statistix (2013) for basic experimental design and data analysis.

Professional Activities:

Serving as reviewer for the journals Environment, Development and Sustainability; Journal of Agricultural and Food Chemistry; Journal of Innovative Bio Research; African Journal of Agriculture Research and Field Crops Research.

Professional Trainings:

1. Attended and presented paper in national conference on “**Crop management strategies for enhancing farm productivity in Punjab**” 2019, 28th October.
2. Attended training on “Financial Management Training” organized by Ayub Agricultural Research Institute, Faisalabad, 2019, 24th June.
3. Attended training on “**Statistical Techniques in Agricultural Research and Emerging Technology in Libraries & Internet Applications**” organized by Ayub Agricultural Research Institute, Faisalabad, Statistical Section. 2019, 24th– 26th April.

4. Availed the training on “Improving Personal Effectiveness”. Pakistan Manpower Institute, Ministry of Federal Education and Professional Training, Islamabad. 2018, 15th – 17th October.
5. Attended “**One day rice breeders training workshop**” at Rice Research Institute, Kala Shah Kaku sponsored by Asian Development Bank through its technical assistance: TA 8578-PAK: Punjab Basmati value Chain. 2018, 28th August.
6. Attended the training course titled “**2018 Seminar on Hybrid Rice Promotion for Pakistan**” at Yuan Longping High-tech Agriculture Co., Ltd. Ministry of Commerce, Hunan, China 2018, 08th – 28th July.
7. Training course on “**Application of Statistical Techniques in Agri. Research**” organized by Ayub Agricultural Research Institute, Faisalabad, Statistical Section. 2018, 21st – 23rd February.
8. Online Training: “**National Adaptation Plans: Building Climate Resilience in Agriculture organized by United Nations Development Programme (UNDP), Food and Agriculture Organization of the United Nations (FAO) and United Nations Institute for Training and Research (UNITAR)**”. 2017, 13th November – 23rd December.
9. Training on “Application of Project Management in MS Project” by Pakistan Manpower Institute, Ministry of Federal Education and Professional Training, Islamabad. 2017, 01st – 05th January.
10. Attended training **programme on water management technologies** held at Water Management Institute, University of Agriculture, Faisalabad. 2016, 20th – 22th August.

Research Publications (*Corresponding author):

1. **Iqbal, S.***, N. Iqbal, U.B. Khalid, M.U. Saleem, A. Iram, M. Rizwan, M. Sabar and T.H. Awan. 2021. Growth, yield and economic analysis of dry-seeded basmati rice. *Sarhad Journal of Agriculture*, 37(1): 200-208. DOI: <http://dx.doi.org/10.17582/journal.sja/2021/37.1.200.208>
2. Saleem, M.U., N. Iqbal, **S. Iqbal***, U.B. Khalid, A. Iram, M. Akhter, T. Latif and T.H. Awan. 2020. Reduced water use and labor cost and increased productivity of direct seeded basmati rice in Punjab, Pakistan. *Sarhad J. Agri.*, 36(2): 603–611. doi.org/10.17582/journal.sja/2020/36.2.603.611
3. **Iqbal, S.***, U.B. Khalid, M.U. Saleem, A. Iram, N. Ahmad, N. Iqbal, M. Sabar and T.H. Awan, 2019. Agronomic efficiency and economics of crop establishing techniques and nitrogen application in fine aromatic rice (*Oryza sativa*). *Intl. J. Agric. Biol.*, 22: 1347–1355. DOI: 10.17957/IJAB/15.1207
4. **Iqbal, S.***, U.B. Khalid, T.H. Awan, N. Iqbal, M.U. Saleem, A. Iram, M.A. Raza, A. Riaz, T. Latif and N. Ahmad. 2019. Qualitative response of super basmati rice to different nitrogen levels under varying rice ecosystem. *African J. Agric. Res.* 14(9): 548–558. DOI: 10.5897/AJAR2018.13662
5. Iqbal, N., M.U. Saleem, T.H. Awan, U.B. Khalid, **S. Iqbal**, A. Iram and M. Akhter. 2017. Effective weed management in dry direct seeded rice for sustainable productivity. *App. Sci. Bus. Econ.* 4(1): 1–8.
6. Shehzad M.A., M. Maqsood, **S. Iqbal**, M. Saleem, M. Hassan, and W. Ahmad. 2012. Impact of nitrogen nutrition and moisture deficits on growth, yield and radiation use efficiency of wheat (*Triticum aestivum* L.). *African J. Biotech.* 11(75): 13980–13987. DOI: 10.5897/AJB12.583



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